

[menuju akhir]

[KEMBALI KE MENU SEBELUMNYA]

<div style="background-color: white; border-color: rgb(23, 128, 221); border-image: none; border-style: dashed; border-width: 2px; border: 2px dashed rgb(23, 128, 221); height: 240px; overflow: auto; padding: 10px; text-align: center; width: 330px;">

DAFTAR ISI

1. Tujuan

2. Alat dan bahan

3. Dasar teori

4. Percobaan

 TUGAS PENGAPLIKASIAN ARITMATIKA, KONSTROL KEBUN OTOMATIS

<!--[if !supportLists]-->1.

<!--[endif]-->Tujuan

[kembali]<o:p></o:p>

a.   Mengetahui

cara mengaplikasikan aritmatika

b.   Mengetahui

cara membuat rangkaian kontrol kebun otomatis<o:p></o:p>

<!--[if !supportLists]-->2.

<!--[endif]-->Alat dan bahan

[kembali] Adapun alat dan bahan

dalam membuat rangkaiannya yaitu: 2.1 Alat
 <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">A. Baterai<span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),

auto;"> </p><b><p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 18.4px;"></p><div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><div class="separator" style="clear: both; color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; text-align: center; user-select: text;"><span style="cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;">   <a href="https://1.bp.blogspot.com/-HyucfZ9xodk/XkZR67fAMlI/AAAAAAAAAWQ/XOvwej14xPQZ9TYhHeLVvB7FyaF8GqE0ACLcBGAsYHQ/s1600/baterai.jpg" style="color: #33aaff; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; margin-left:

1em; margin-right: 1em; text-decoration-line: none; user-select: text;"> <span style="color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;"><span face=""arial" , "tahoma" , "helvetica" , "freesans" , sans-serif" style="cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto; user-select: text;"><span face=""arial" , "tahoma" , "helvetica" , "freesans" , sans-serif" style="cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;"><br style="cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;" /><div class="separator" style="clear: both; color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; text-align: center; user-select: text;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

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auto;">Gambar Baterai</
div><div class="separator" style="clear: both; color: #222222; cursor:
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       Baterai (Battery) adalah sebuah alat yang dapat merubah energi

kimia yang disimpannya menjadi energi Listrik yang dapat digunakan oleh

suatu perangkat Elektronik. Hampir semua perangkat elektronik yang

portabel seperti Handphone, Laptop, Senter, ataupun Remote Control

menggunakan Baterai sebagai sumber listriknya. Dengan adanya Baterai,

kita tidak perlu menyambungkan kabel listrik untuk dapat mengaktifkan

perangkat elektronik kita sehingga dapat dengan mudah dibawa

kemana-mana. Dalam kehidupan kita sehari-hari, kita dapat menemui dua

jenis Baterai yaitu Baterai yang hanya dapat dipakai sekali saja (Single

Use) dan Baterai yang dapat di isi ulang
(Rechargeable). <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span style="color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0

d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;"> <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span style="color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;">2.1. Bahan
 <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span style="color: #222222; cursor: url("https://lh3.googleusercontent.com/proxy/JoJL934uMu5R6QtsXmB5A2YA0gUdZeB5cDqc1BfzGVNmGlGCh4IeUN4iE5ZOjFz7saJLQRfzMta4JFWJhk9zF-AnS_aARbsx=s0-d"), url("https://lh5.googleusercontent.com/proxy/8EIJJujO8qqlh_xt4_jt4EK4jUFgAy2NhhfZRptRoq7X0d4bJdD004i3oYaKrr_t5gLvO3_np6RTsD45RU6244UlfMJuygiq=s0-d"), auto !important; user-select: text;">   A. Sensor

soil moisture Sensor soil

moisture adalah sensor yang akan mendeteksi kelembapan air pada tanah

 B.

Sensor

infrared Sensor infrared adalah sensor yang akan mendeteksi sesuatu yang melewati

cahaya infrared yang akan berlogika 1 saat sesuatu melewati infrared <img alt="" data-original-height="278" data-original-width="585" height="152" src="https://blogger.googleusercontent.com/img/a/AVvXsEh3C0VDXlEwQr8KItIVqwyXVC3bOjFBC1HC0unJYUdbQnFJvD1oTUadF-EG8hTFwlvrBZs49FA5Kg-7eKMh0vva9hBxk5u_pEBLuiouC6k5x_HmMfV5-j3trGyQsypWKvcr67FcQ26TH9jLYv4EQZRVjIwAt2JqWQ4vsb84ejEQWoSL3NPAom39uVQcFQ" width="320"

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auto;">Description</p></td></tr><tr style="box-sizing: border-box; cursor:
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text-align: justify;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;">VCC</p></td><td style="border-color: rgb(221, 221, 221); border-style:
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text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Power Supply
Input</p></td></tr><tr style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing:
border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 107px;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;">GND</p></td><td style="border-color: rgb(221, 221, 221); border-style:
solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 210px;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Power Supply
Ground</p></td></tr><tr style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing:
border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 107px;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;">OUT</p></td><td style="border-color: rgb(221, 221, 221); border-style:
solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 210px;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Active High
Output</p></td></tr></tbody></table><p class="MsoListParagraph"
style="margin-left: 0.5in; mso-list: l0 level1 lfo1; text-align: center; text-indent: -0.25in;"><span

style="font-family: times;">
 grafik respon sensor infrared
      C.

Sensor

touch Sensor touch adalah sensor yang akan mendeteksi sentuhan. Sensor ini

akan mengalami perubahan logika 0 ke 1 saat seseorang menyentuhnya dan akan berubah

lagi dari 1 ke 0 saat seseorang menyentuhnya lagi. <span style="font-family: times; font-size:

13.5pt;"><a
href="https://blogger.googleusercontent.com/img/a/AVvXsEgZ3IklWNUr872e7VA9bjJhWabrCUmjAaXYE
ALodnlBXb4dDn8SX7U3ETDLi3hpLpPrQi7GLGZbUtgs-hyD5bzxJaq_Fjzg2bouO3x09GaeVqg69gvmom18U5
d0E2iiIyESc1kGGH_cw8nEi3TBmvcbkFEJSY__2M0Xn1Y7DmbEJs-ZRgn4QbWuXTchJA" style="margin-left:
1em; margin-right: 1em;"><img alt="" data-original-height="283" data-original-width="579"
height="156"
src="https://blogger.googleusercontent.com/img/a/AVvXsEgZ3IklWNUr872e7VA9bjJhWabrCUmjAaXYEA
LodnlBXb4dDn8SX7U3ETDLi3hpLpPrQi7GLGZbUtgs-hyD5bzxJaq_Fjzg2bouO3x09GaeVqg69gvmom18U5d
0E2iiIyESc1kGGH_cw8nEi3TBmvcbkFEJSY__2M0Xn1Y7DmbEJs-ZRgn4QbWuXTchJA" width="320"
/> <p class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l0 level1 lfo1;
text-indent: -0.25in;"><span
style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;"></p><div style="background-color: white; color: #222222;
cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family:
Arial,Tahoma,Helvetica,FreeSans,sans-serif;"><div style="color: black; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;
text-align: left;"> <span
style="font-family: times;">Spesifikasi :
<ul style="text-align: left;">
<span
style="font-family: times;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Operating voltage
2.0V~5.5V
<span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Operating current
@VDD=3V, no load
<span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">At low power mode
typical 1.5uA, maximum 3.0uA
<span
style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">The response time
max 220mS at low power mode @VDD=3V
<span style="font-family:
times;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Sensitivity can adjust
by the capacitance(0~50pF) outside
<span
style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Stable touching
detection of human body for replacing traditional direct switch key
<span
style="font-family: times;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Provides Low Power mode
Provides direct mode、toggle mode by pad option(TOG pin) Q pin is CMOS output
All output modes can be selected active high or active low by pad option(AHLB pin)
After power-on have about 0.5sec stable-time, during the time do not touch the key pad, and the function is disabled
Auto

calibration for life at low power mode the re-calibration period is

about 4.0sec normally, when key detected touch and released touch, the

auto re-calibration will be redoing after about 16sec from releasing key
The sensitivity of TTP223N-BA6 is better than TTP223-BA6's. but the stability of TTP223N-BA6 is worse than TTP223-BA6's. <div style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;">
 Konfigurasi Pin : <p class="MsoListParagraphCxSpMiddle" style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> <span

style="font-family: times;">* Pin 1 : Vcc * Pin 2 : Gnd * Pin 3 : Vout
  grafik respon <p style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; text-align: center;">
 <p class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l0 level1 lfo1;

text-indent: -0.25in;">D.

Opamp Opamp adalah komponen elektronika yang akan melakukan penguatan

dan penyearah tegangan untuk rangkaian <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: center;"> konfigurasi pin

 <div style="border-color: currentcolor; border-image: none; border-style: none;

border-width: 0px; border: 0px; margin: 0px; padding: 0px; vertical-align: baseline;">Pin-1 dan pin-8 adalah o / p dari komparator Pin-2 dan pin-6 adalah pembalik i / id Pin-3 dan pin-5 adalah non inverting i / id Pin-4 adalah terminal GND Pin-8 adalah VCC +
  spesifikasi
 <ul style="line-height: 1.4; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="margin: 0px 0px 0.25em; padding: 0px;">Ini terdiri dari dua op-amp internal dan frekuensi dikompensasi untuk gain kesatuan
<li style="margin: 0px 0px 0.25em; padding: 0px;">Gain tegangan besar adalah 100 dB
<li style="margin: 0px 0px 0.25em; padding: 0px;">Lebar pita lebar adalah 1MHz
<li style="margin: 0px 0px 0.25em; padding: 0px;">Jangkauan pasokan listrik yang luas termasuk pasokan listrik tunggal dan ganda
<li style="margin: 0px 0px 0.25em; padding: 0px;">Rentang catu daya tunggal adalah dari 3V ke 32V
<li style="margin: 0px 0px 0.25em; padding: 0px;">Jangkauan pasokan listrik ganda adalah dari + atau -1.5V ke + atau -16V
<li style="margin: 0px 0px 0.25em; padding: 0px;">Penyaluran arus pasokan sangat rendah, yaitu 500 µA
<li style="margin: 0px 0px 0.25em; padding: 0px;">2mV tegangan rendah i / p offset
<li style="margin: 0px 0px 0.25em; padding: 0px;">Mode umum rentang tegangan i / p terdiri dari ground
<li style="margin: 0px 0px 0.25em; padding: 0px;">Tegangan catu daya dan diferensial i / p tegangan serupa ayunan tegangan o / p besar <span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><div style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; color: #333333; font-family: Roboto,sans-serif; margin: 0px; padding: 0px; vertical-align: baseline;">
 <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Georgia,Utopia,"Palatino Linotype",Palatino,serif;"><b style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif; text-align: justify;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /> <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Georgia,Utopia,"Palatino Linotype",Palatino,serif; text-align: center;"><div class="separator" style="clear: both; color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif; font-weight: bold; text-align: center;"> <span style="font-family:

times;">
 E.   .   Sensor

hujan

Sensor hujan

adalah sensor yang akan medeteksi butiran air hujan. Sensor ini dimanfaatkan

untuk memberi Tindakan pada saat hujan.

 F.   sensor

PIR   <img border="0" data-original-height="162" data-original-width="200"

src="https://1.bp.blogspot.com/-NxGp_IDGa4A/YCqn-tHkshI/AAAAAAAACQc/qbaN_pd8TpAVLOTStpGzo7jypEb-cF1hACLcBGAsYHQ/s0/sensor%2Bpir.PNG" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; border: 1px solid rgb(233, 233, 233); box-shadow: rgba(0, 0, 0, 0.1) 1px 1px 5px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; padding: 5px; position: relative;" /> Sensor

PIR atau disebut juga dengan Passive Infra Red merupakan sensor yang digunakan

untuk mendeteksi adanya pancaran sinar infra merah dari suatu object. Sesuai

dengan namanya sensor PIR bersifat pasif, yang berarti sensor ini tidak

memancarkan sinar infra merah melainkan hanya dapat menerima radiasi sinar

infra merah dari luar.

<p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-size: 12pt; line-height: 18.4px;">Konfigurasi pin: <div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px; text-align: center;"><a href="https://1.bp.blogspot.com/-F9339AqpYg0/YCqo3Hd_E7I/AAAAAAAACQk/eQmlPqNZrbkJaIp5yELrzuUtASJwomkvQCLcBGAsYHQ/s264/konfigurasi%2Bpin%2Bpir.jpg" style="color: #1a8e57; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin-left: 1em;

margin-right: 1em; text-decoration-line: none;"> <br style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px;" /><span style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 12pt; line-height: 18.4px;"><div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Georgia, Utopia, "Palatino Linotype", Palatino, serif; font-size: 15.4px;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 12pt; line-height: 18.4px;">Spesifikasi : <div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Georgia, Utopia, "Palatino Linotype", Palatino, serif; font-size: 15.4px;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 12pt; line-height: 18.4px;"><table class="tg" data-style="border-collapse: collapse; border-spacing: 0;" style="border-collapse: collapse; border-spacing: 0px; border: 1px solid rgb(224, 224, 224); color: #3d3d3d; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Open Sans"; font-size: 14px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; height: auto; line-height: 24px; margin: 10px 0px; max-width: 100%; overflow-wrap: break-word; padding: 0px; table-layout: auto; vertical-align: top; width: 508.891px;

word-break: break-word;"><tbody style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-size: 15px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><tr style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><th data-style="font-family: Arial, sans-serif; font-size: 14px; font-weight: normal; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: #329a9d; background-color: #329a9d; color: #ecf4ff; text-align: center;" style="background: rgb(50, 154, 157); border-color: rgb(50, 154, 157); border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; color: #ecf4ff; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: normal; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">Item</th><th data-style="font-family: Arial, sans-serif; font-size: 14px; font-weight: normal; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: #329a9d; background-color: #329a9d; color: #ecf4ff; text-align: center;" style="background: rgb(50, 154, 157); border-color: rgb(50, 154, 157); border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; color: #ecf4ff; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: normal; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">Value</th></tr><tr style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:

inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">Input Voltage</td><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">DC 4.5V ~ 20V</td></tr><tr style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">Static Current</td><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;"><50uA</td></tr><tr style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px;

box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: middle; word-break: normal;">Output Signal</td><td
data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid;
border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;"
style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: middle; word-break: normal;">0V / 3V (Output high when motion
detected)</td></tr><tr style="border: 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px;
overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td
data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid;
border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;"
style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: middle; word-break: normal;">Sensing Range</td><td
data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid;
border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;"
style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: middle; word-break: normal;">7 meters (120 degree cone)</td></tr><tr
style="border: 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px;

overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center; vertical-align: top;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: top; word-break: normal;">Delay time</td><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center; vertical-align: top;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: top; word-break: normal;">8s ~ 200s (adjustable)</td></tr><tr style="border: 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">Operating Temperature</td><td data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;" style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: middle; word-break: normal;">-15℃ ~ +70℃</td></tr><tr

style="border: 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px;
overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td
data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid;
border-width: 1px; overflow: hidden; word-break: normal; border-color: inherit; text-align: center;
vertical-align: top;" style="border-color: inherit; border-image: initial !important; border-style: solid;
border-width: 1px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: top; word-break: normal;">Dimensions</td><td data-style="font-family:
Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow:
hidden; word-break: normal; border-color: inherit; text-align: center; vertical-align: top;"
style="border-color: inherit; border-image: initial !important; border-style: solid; border-width: 1px;
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: top; word-break: normal;">24mm*32mm*25mm(Height with
lens)</td></tr><tr style="border: 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px;
overflow-wrap: break-word; padding: 0px; vertical-align: top; word-break: break-word;"><td
data-style="font-family: Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid;
border-width: 1px; overflow: hidden; word-break: normal; border-color: black; text-align: center;
vertical-align: top;" style="border-color: black; border-image: initial !important; border-style: solid;
border-width: 1px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,
sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight:
inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px;
text-align: center; vertical-align: top; word-break: normal;">Weight</td><td data-style="font-family:
Arial, sans-serif; font-size: 14px; padding: 10px 5px; border-style: solid; border-width: 1px; overflow:
hidden; word-break: normal; border-color: black; text-align: center; vertical-align: top;"
style="border-color: black; border-image: initial !important; border-style: solid; border-width: 1px;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial, sans-serif; font-size: 14px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: 24px; margin: 0px; overflow-wrap: break-word; overflow: hidden; padding: 10px 5px; text-align: center; vertical-align: top; word-break: normal;">6.6g</td></tr></tbody></table> <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-size: 12pt; line-height: 18.4px;">Grafik Respon Pir terhadap suhu</p><div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px; text-align: center;"> <br style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px;" /><span style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 12pt; line-height: 18.4px;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /><p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family:

"Times New Roman"; font-size: 15.4px;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-size: 12pt; line-height: 18.4px;"> <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-size: 12pt; line-height: 18.4px;">Grafik sensor pir terhadap jarak, kecepatan,arah objek <div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "Times New Roman"; font-size: 15.4px; text-align: center;">

 G.

Diode Diode adalah komponen elektronika yang akan menyearahkan tegangan dengan

syarat katoda harus lebih kecil dibanding anoda. <span style="font-family: times; font-size:

13.5pt;"><a
href="https://blogger.googleusercontent.com/img/a/AVvXsEiyXQ9NeFBeAViSWpV9WM6UGKNRP3jScMzKBxn9_8rgjfKSdLUUmDISWxIPxRxmUu7kpgIugIbzfW_6TomkF7oBNDxH0kmSguZiMZiPZzgLW2yFjQv16HumBvKE77erjRzM4XjJqrT64Ifxo4vrQb7P2Q3mYgt1m7QB8TLvrA4rHyYNCgBQ8pIk-sZYTQ"
style="margin-left: 1em; margin-right: 1em;"><img alt="" data-original-height="207"
data-original-width="508" height="130"
src="https://blogger.googleusercontent.com/img/a/AVvXsEiyXQ9NeFBeAViSWpV9WM6UGKNRP3jScMzKBxn9_8rgjfKSdLUUmDISWxIPxRxmUu7kpgIugIbzfW_6TomkF7oBNDxH0kmSguZiMZiPZzgLW2yFjQv16HumBvKE77erjRzM4XjJqrT64Ifxo4vrQb7P2Q3mYgt1m7QB8TLvrA4rHyYNCgBQ8pIk-sZYTQ" width="320"
/> <p class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l0 level1 lfo1;
text-align: center; text-indent: -0.25in;"><span style="font-size:
13.5pt;"><img border="0" data-original-height="472" data-original-width="640" height="176"
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style="margin-left: 0.5in; mso-list: l0 level1 lfo1; text-align: left; text-indent: -0.25in;"><span
style="font-family: times;"><br style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"
/></p><div style="color: #222222; cursor:
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: <ul style="border-color: currentcolor; border-image:
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font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; list-style: outside none
none; margin: 0px 0px 15px 30px; padding: 0px; vertical-align: baseline;"><li style="border-color:
currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px;

padding: 0px; vertical-align: baseline;">Package Type: <span style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Available in DO-41 & SMD Packages
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px; padding: 0px; vertical-align: baseline;">Diode Type: <span style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Silicon Rectifier General Usage Diode
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px; padding: 0px; vertical-align: baseline;">Max Repetitive Reverse Voltage is: <span style="border-color: currentcolor; border-image: none; border-style:

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font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align:
baseline;">1000 Volts
<li style="border-color: currentcolor;
border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px;
padding: 0px; vertical-align: baseline;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Average Fwd
Current: <span style="border-color: currentcolor; border-image: none; border-style: none;
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baseline;">1000mA
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;
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padding: 0px; vertical-align: baseline;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Non-repetitive Max
Fwd Current: <span style="border-color: currentcolor; border-image: none; border-style: none;
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align:
baseline;">30A
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font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px; padding: 0px; vertical-align: baseline;">Max Power Dissipation is: <span style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">3W
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; list-style: outside none square; margin: 0px; padding: 0px; vertical-align: baseline;">Max Storage & Operating temperature Should Be: <span style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">-55 to +175 Centigrade <span

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arial;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Nomor
Pin</p></td><td style="border-color: rgb(221, 221, 221); border-style:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; vertical-align: inherit;">Anoda</p></td><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 373px;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; vertical-align: inherit;">Arus selalu Masuk melalui Anoda</p></td></tr><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 92px;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; vertical-align: inherit;">2</p></td><td style="border-color: rgb(221, 221, 221); border-style:

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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 151px;"><p style="box-sizing: border-box; cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;
vertical-align: inherit;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;">Katoda</p></td><td style="border-color: rgb(221, 221, 221);
border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
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text-align: justify;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;
vertical-align: inherit;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Arus selalu Keluar
melalui Katoda</p></td></tr></tbody></table><p class="MsoListParagraph"
style="margin-left: 0.5in; mso-list: l0 level1 lfo1; text-indent: -0.25in;"><span style="font-family:
times;"> </p><p class="MsoListParagraph"
style="margin-left: 0.5in; mso-list: l0 level1 lfo1; text-indent: -0.25in;"><span style="font-family:
times;">H.<span style="font-size: 7pt; font-stretch: normal;
font-variant-east-asian: normal; font-variant-numeric: normal; line-height: normal;">

Transistor</p><p
class="MsoListParagraph" style="margin-left: 0.5in;"><span style="font-family: times; font-size:
13.5pt;">Transistor adalah komponen elektronika yang memiliki 3 terminal yaitu

terminal base , collector , emitor . tegangan akan masuk ke relay saat terminal

base tidak dialiri tegangan <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: center;"><span face="Arial, Tahoma, Helvetica, FreeSans, sans-serif" style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> Konfigurasi Pin <div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;">1. Collector 2. Base 3. Emitter   <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: center;"><div style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;"> Spesifikasi : <div style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;"><span style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 15.3333px;">Transistor Type : NPN <span style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align:
left;">Voltage – Collector Emitter Breakdown (Max) : 45 V <span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><div style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align:
left;">Current- Collector (Ic) (Max) : 100mA <span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><div style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;">Power
– Max : 625 mW <span style="background-attachment: initial; background-clip: initial;
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initial; background-size: initial; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
15.3333px;"><div style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;"><span
style="background-attachment: initial; background-clip: initial; background-image: initial;
background-origin: initial; background-position: initial; background-repeat: initial; background-size:
initial; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
15.3333px;">DC Current Gain (hFE) (Min) @ Ic, Vce<span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> : 110 @ 2mA,
5V <span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><div style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;">Vce
Saturation (Max) @ Ib Ic : 300mV, @ 5mA, 100mA <span style="background-attachment:
initial; background-clip: initial; background-image: initial; background-origin: initial;
background-position: initial; background-repeat: initial; background-size: initial; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
15.3333px;"><div style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;"><span style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 15.3333px;">Frequency – Transition : 300MHz Current- Collector Cutoff (Max) : - Mounting Type : Through Hole Package / Case : TO-226-3, TO-92-3 (TO-226AA) Formed Leads Packaging : Tape & Box (TB Lead Free Status : Lead Free <div style="color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;">RoHs Status : RoHs Compliant <p class="MsoNormal" style="background-color: white; cursor:

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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: times;"><span
face=""Arial","sans-serif"" style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
18.4px;">Data Sheet Transistor</p><div class="separator"
style="background-color: white; clear: both; cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;
text-align: center;"><a
href="https://1.bp.blogspot.com/-_Xn-WJqq0f0/YCp-V8RbMYI/AAAAAAAACLA/VIhp2x5t8ZM91lp_rYKPv
pPkO2dUxYOywCLcBGAsYHQ/s640/data%2Bsheet%2Btransistor.JPG" style="color: #1a8e57; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin-left: 1em;
margin-right: 1em; text-decoration-line: none;"><img border="0" data-original-height="587"
data-original-width="640"
src="https://1.bp.blogspot.com/-_Xn-WJqq0f0/YCp-V8RbMYI/AAAAAAAACLA/VIhp2x5t8ZM91lp_rYKPvp
PkO2dUxYOywCLcBGAsYHQ/s280/data%2Bsheet%2Btransistor.JPG" style="background-attachment:
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233); box-shadow: 1px 1px 5px rgba(0, 0, 0, 0.1); cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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relative;" width="280" /> <span
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style="background-color: white; cursor:
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18.4px;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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class="MsoNormal" style="background-color: white; cursor:
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face=""Arial","sans-serif"" style="cursor:
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18.4px;"></p><p class="MsoNormal" style="background-color: white; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 18.4px;">Grafik Respon:</p><p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 33.7333px;"></p><div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; text-align: center;"> <br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /><span style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; line-height: 18.4px;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /><div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: center;"><a href="https://1.bp.blogspot.com/-4aNbEcUXHyM/YCp-jCT6aJI/AAAAAAAACLM/_LW4XHcRJFgoGJtEb6Tsk

_0AGPKWY09WwCLcBGAsYHQ/s400/graf2.JPG" style="color: #1a8e57; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin-left: 1em; margin-right: 1em; text-decoration-line: none;">   I.

Relay Relay adalah komponen elektronika yang akan menutup rangkaian jika

relay dialiri tegangan <div style="background-color: white; color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif; text-align: center;"> <span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /> Konfigurasi PIN Relay <table class="MsoTableGrid" style="border-collapse: collapse; border-color: windowtext; border-image: none; border-spacing: 0px; border-style: solid; border-width: 1pt; border: 1pt solid windowtext; color: #303030; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin-bottom: 23px; max-width: 100%; width: 772px;"><tbody style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-color: windowtext; border-image: none; border-style: solid; border-width: 1pt; border: 1pt solid windowtext; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;"><b style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Nomor PIN</p></td><td style="border-bottom: 1pt solid windowtext; border-color: windowtext windowtext windowtext currentcolor; border-image: initial;

border-left: none; border-right: 1pt solid windowtext; border-style: solid solid solid none; border-top: 1pt solid windowtext; border-width: 1pt 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;"><b style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Nama Pin</p></td><td style="border-bottom: 1pt solid windowtext; border-color: windowtext windowtext windowtext currentcolor; border-image: initial; border-left: none; border-right: 1pt solid windowtext; border-style: solid solid solid none; border-top: 1pt solid windowtext; border-width: 1pt 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;"><b style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Deskripsi</p></td></tr><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext; border-image: initial; border-left: 1pt solid windowtext; border-right: 1pt solid windowtext; border-style: none solid solid; border-top: none; border-width: medium 1pt 1pt; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">1</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Coil End 1</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Digunakan untuk memicu (On / Off) Relay, Biasanya satu ujung terhubung ke 12V dan ujung lainnya ke ground</p></td></tr><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext; border-image: initial; border-left: 1pt solid windowtext; border-right: 1pt solid windowtext; border-style: none solid solid; border-top: none; border-width: medium 1pt 1pt; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">2</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Coil End 2</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Digunakan untuk memicu (On / Off) Relay, Biasanya satu ujung terhubung ke 12V dan ujung lainnya ke ground</p></td></tr><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; height: 2.3pt;"><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext;

border-image: initial; border-left: 1pt solid windowtext; border-right: 1pt solid windowtext; border-style: none solid solid; border-top: none; border-width: medium 1pt 1pt; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">3</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Common (COM)</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 16.1px;">Common terhubung ke salah satu Ujung Beban yang akan dikontrol</p></td></tr><tr style="box-sizing: border-box; cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; height: 2.3pt;"><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext; border-image: initial; border-left: 1pt solid windowtext; border-right: 1pt solid windowtext; border-style: none solid solid; border-top: none; border-width: medium 1pt 1pt; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 0.0001pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: normal;">4</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 0.0001pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: normal;">Normally Close (NC)</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px

0.0001pt; padding: 0in 5.4pt; text-align: justify;"><span
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normal;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; height: 2.3pt;"><span
style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align:
inherit;"><span style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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black;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align:
inherit;">Ujung lain dari beban terhubung ke NO atau NC. <span style="box-sizing:
border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align:
inherit;">Jika terhubung ke NC beban tetap terhubung sebelum
pemicu</p></td></tr><tr style="box-sizing:
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style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext;
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none solid solid; border-top: none; border-width: medium 1pt 1pt; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top; width: 58.75pt;" width="78"><p align="center" style="box-sizing:
border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px
0.0001pt; padding: 0in 5.4pt; text-align: center;"><span
style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
normal;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="color:
black;">5</p></td><td style="border-bottom: 1pt solid windowtext;
border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt
solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt
medium; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 136.5pt;" width="182"><p align="center" style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 0.0001pt; padding: 0in 5.4pt; text-align: center;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: normal;">Normally Open (NO)</p></td><td style="border-bottom: 1pt solid windowtext; border-color: currentcolor windowtext windowtext currentcolor; border-left: none; border-right: 1pt solid windowtext; border-style: none solid solid none; border-top: none; border-width: medium 1pt 1pt medium; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top; width: 263.75pt;" width="352"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 0.0001pt; padding: 0in 5.4pt; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: normal;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; height: 2.3pt;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align: inherit;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align: inherit;">Ujung lain dari beban terhubung ke NO atau NC. <span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; vertical-align: inherit;">Jika terhubung ke NO, beban tetap terputus sebelum pemicu</p></td></tr></tbody></table> <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif;"> Spesifikasi : <div style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: center;"><ul style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.4; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Trigger Voltage (Voltage across coil) : 5V DC
<li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Trigger Current (Nominal current) : 70mA
<li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Maximum AC load current: 10A @ 250/125V AC
<li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Maximum DC load current: 10A @ 30/28V DC
<li style="box-sizing: border-box; cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Compact 5-pin configuration with plastic moulding
<li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Operating time: 10msec Release time: 5msec
<li style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none disc; margin: 0px 0px 0.25em; padding: 0px; text-align: left;">Maximum switching: 300 operating/minute (mechanically)   J.

LED
 <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> Spesifikasi : <ul style="text-align: left;">
Superior weather resistance
5mm Round Standard Directivity
UV Resistant Eproxy
Forward Current (IF): 30mA
Forward Voltage (VF): 1.8V to

2.4V
Reverse Voltage: 5V
Operating Temperature: -30℃ to +85℃
Storage Temperature: -40℃ to +100℃
Luminous Intensity: 20mcd
<p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> Konfigurasi Pin :   <ul style="text-align: left;">
Pin 1 : Positive terminal of LED
Pin 2 : Negative terminal of LED K.

Motor

DC Motor DC adalah komponen elektronika yang akan berputar sesuai

dengan rotasi dan akan berputar jika adanya gaya medan magnet pada motor <span style="background-color: white; color: #222222; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: justify;"> <div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif; font-weight: bold;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /> Konfigurasi PIN <table style="border-collapse: collapse; border-color: rgb(221, 221, 221); border-image: none; border-spacing: 0px; border-style: solid; border-width: 1px; border: 1px solid rgb(221, 221, 221); color: #303030; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: bold; margin-bottom: 23px; max-width: 100%; width: 772px;"><tbody style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">No:</p></td><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;"><span style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight:
normal;">Pin Name</p></td><td style="border-color: rgb(221, 221,
221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight:
normal;">Description</p></td></tr><tr style="box-sizing: border-box;
cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing:
border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight:
normal;">1</p></td><td style="border-color: rgb(221, 221, 221); border-style:
solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65;
padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;
text-align: justify;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Terminal 1</p></td><td rowspan="2" style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;">A

normal DC motor would have only two terminals. Since these terminals

are connected together only through a coil they have not polarity.

Revering the connection will only reverse the direction of the motor</p></td></tr><tr style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px; text-align: justify;">2</p></td><td style="border-color: rgb(221, 221, 221); border-style: solid; border-width: 1px 1px 1px 0px; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.65; padding: 8px; vertical-align: top;"><p style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 6px 0px 10px;

text-align: justify;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight:
normal;">Terminal
2</p></td></tr></tbody></table><p style="box-sizing: border-box; color:
#303030; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: bold;
margin: 6px 0px 10px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;"> </p><h3 style="box-sizing: border-box; color: #111111;
cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 28px;
margin: 11.5px 0px; position: relative;"><span style="font-family:
times;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> DC Motor
Specifications</h3><ul style="box-sizing: border-box; color:
#303030; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.4;
margin: 0px 0px 11.5px 18px; padding: 0px 0px 0px 20px;"><li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Standard 130 Type
DC motor
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Operating Voltage:
4.5V to 9V
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"),
auto;">Recommended/Rated Voltage: 6V
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Current at No load:
70mA (max)
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">No-load Speed: 9000
rpm
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Loaded current:
250mA (approx)
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Rated Load:
10g*cm
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Motor Size: 27.5mm
x 20mm x 15mm
<li style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; list-style: outside none
disc; margin: 0px 0px 0.25em; padding: 0px;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Weight: 17
grams <p class="MsoListParagraph" style="margin-left: 0.5in;
mso-list: l0 level1 lfo1; text-indent: -0.25in;"><span style="font-size:
13.5pt;">L.<span style="font-size: 7pt; font-stretch: normal; font-variant-east-asian: normal;
font-variant-numeric: normal; line-height: normal;">

Ground Ground adalah komponen elektronik yang menjadi titik tumpu akhir rangkaian

yang dimana tegangan dan arusnya bernilai 0

 M.

Resistor

Resistor adalah komponen elektronika yang akan menghambat arus dan

tegangan pada rangkaian

<h3 style="background-color: white; box-sizing: border-box; color: #111111; font-weight: 500; line-height: 28px; margin-bottom: 11.5px; margin-top: 11.5px; text-align: left;">Features</h3><ul style="background-color: white; box-sizing: border-box; color: #303030; margin: 0px 0px 11.5px 18px; padding: 0px 0px 0px 20px; text-align: left;"><li style="box-sizing: border-box; list-style: outside none disc;">Carbon Film Resistor
<li style="box-sizing: border-box; list-style: outside none disc;">4-band Resistor
<li style="box-sizing: border-box; list-style: outside none disc;">Resistor value varies based on selected parameter
<li style="box-sizing: border-box; list-style: outside none disc;">Power rating varies based on selected parameter
   <table class="table table-condensed table-striped" style="background-color: white; border-collapse: collapse; border-spacing: 0px; color: #333333; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: "ms sans serif",verdana,helvetica; font-weight: 700; margin-bottom: 20px; max-width: 100%; width: 845px;"><tbody style="box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><tr style="background-color: palegoldenrod; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Specifications</td><td style="border-top: 1px solid
rgb(221, 221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;"> </td></tr><tr style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Resistance (Ohms)</td><td style="border-top: 1px solid
rgb(221, 221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">10K, 500K</td></tr><tr style="background-color: #f9f9f9;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Power (Watts)</td><td style="border-top: 1px solid rgb(221,
221, 221); box-sizing: border-box; cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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padding: 5px; vertical-align: top;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">0.25W, 1/4W</td></tr><tr style="box-sizing: border-box;
cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:
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padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Tolerance</td><td style="border-top: 1px solid rgb(221, 221,
221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">±5%</td></tr><tr style="background-color: #f9f9f9;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Packaging</td><td style="border-top: 1px solid rgb(221, 221,
221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
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padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Bulk</td></tr><tr style="box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:

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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Composition</td><td style="border-top: 1px solid rgb(221,
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Carbon Film</td></tr><tr style="background-color: #f9f9f9;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Temperature Coefficient</td><td style="border-top: 1px solid
rgb(221, 221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">350ppm/°C</td></tr><tr style="box-sizing: border-box;
cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Lead Free Status</td><td style="border-top: 1px solid rgb(221,
221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;

padding: 5px; vertical-align: top;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">Lead Free</td></tr><tr style="background-color: #f9f9f9;
box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><td
style="border-top: 1px solid rgb(221, 221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">RoHS Status</td><td style="border-top: 1px solid rgb(221,
221, 221); box-sizing: border-box; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 1.42857;
padding: 5px; vertical-align: top;"><span style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span
style="font-family: arial;">RoHS Compliant</td></tr></tbody></table><p
class="MsoNormal" style="background-color: white; cursor:
url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),
url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family:
arial;"><span face=""Arial","sans-serif"" style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height:
18.4px;">Data sheet resistor:</p><div class="separator" style="background-color: white; clear:
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text-align: center;"><a
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margin-right: 1em; text-decoration-line: none;"><img border="0" data-original-height="132"
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border: 1px solid rgb(233, 233, 233); box-shadow: 1px 1px 5px rgba(0, 0, 0, 0.1); cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; padding: 5px; position: relative;" /> <br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /><span style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; line-height: 18.4px;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /><div class="separator" style="background-color: white; clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-family: arial; text-align: center;">

<p class="MsoListParagraphCxSpMiddle" style="background: white none repeat scroll 0% 0%; line-height: normal; mso-add-space: auto; mso-list: l2 level1 lfo1; mso-margin-bottom-alt: auto; mso-margin-top-alt: auto; text-indent: -18pt;"><!--[if !supportLists]--><b style="mso-bidi-font-weight: normal;"><i style="mso-bidi-font-style: normal;"><span style="color: black; font-family: "Times New Roman","serif"; mso-bidi-font-size: 12.0pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN; mso-themecolor: text1;">3.

<span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN; mso-themecolor: text1;">3. Dasar teori

[kembali]<o:p></o:p> <!--[if !supportLists]-->A.   Sensor

soil moisture <span style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; font-family: "Times New Roman", serif; font-size: 12pt;">Sensor soil moisture merupakan sebuah sensor yang dapat

mengukur kadar air atau kelembaban tanah. Pengaplikasian sensor ini biasa

digunakan pada suatu tanaman, ada jenis tanaman yang tidak boleh terlalu lembab

atau kering contohnya adalah jamur, sehingga kita membutuhkan adanya alat yang

dapat mengukur kelembaban tanah. Jenis sensor yang akan dibahas pada artikel

ini yaitu model probe seperti gambar di bawah :

 Spesifikasi

dari sensor ini adalah : <p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt;

margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Comparator

menggunakan LM393</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Hanya

menggunakan 2 plat kecil sebagai sensor</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Supply

Tegangan 3.3-5 VDC</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·<span style="font-family: "Times New Roman"; font-size:

7pt; font-stretch: normal; font-variant-east-asian: normal; font-variant-numeric: normal; line-height: normal;">

Digital

output D0 dapat secara langsung dikoneksikan dengan MCU dengan mudah</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Supply

tegangan 3.3v-5v</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Terdapat

trimpot untuk mengatur sensitifitas</p><p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Menggunakan

chip comparator LM393 yang stabil <p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Dimensi

: 3.2cm x 1.4cm <p class="MsoNormal" style="background: white none repeat scroll 0% 0%; line-height: normal; margin-bottom: 17.15pt; margin-left: 50.75pt; margin-right: 0in; margin-top: 0in; margin: 0in 0in 17.15pt 50.75pt; mso-list: l0 level1 lfo1; tab-stops: list .5in; text-indent: 0in; vertical-align: baseline;">·

Terdapat

analog dan digital output

 B.

Sensor

infrared
 Sensor infrared adalah sensor yang akan mendeteksi sesuatu yang melewati

cahaya infrared yang akan berlogika 1 saat sesuatu melewati infrared Infra red (IR) detektor atau sensor infra merah adalah komponen

elektronika yang dapat mengidentifikasi cahaya infra merah (infra red, IR).

Sensor infra merah atau detektor infra merah saat ini ada yang dibuat khusus

dalam satu modul dan dinamakan sebagai IR Detector Photomodules. IR Detector

Photomodules merupakan sebuah chip detektor inframerah digital yang di dalamnya

terdapat fotodiode dan penguat (amplifier). Bentuk dan Konfigurasi Pin IR Detector Photomodules TSOP <img alt="" data-original-height="818" data-original-width="655" height="240" src="https://blogger.googleusercontent.com/img/a/AVvXsEg2TozzZ6zVJjHqFNAyWDlrVxETiyHt1FFW75iY

gpvBrUZB517xjo501KcBzq-t2QH0DaI1Pl9mBznq3Lwd1z4d6g5kaZ7dyWUJ8JuLwSTQI20fkNP181qbdxxp_3t6rmOV1uTXgMvwGm5t5b7xZNWhDwiMn99jcWxmreQbEw7cWc4amMg9D_ED5Khgcw" width="192" /> sistem sensor infra merah pada dasarnya menggunakan infra merah

sebagai media untuk komunikasi data antara receiver dan transmitter. Sistem

akan bekerja jika sinar infra merah yang dipancarkan terhalang oleh suatu benda

yang mengakibatkan sinar infra merah tersebut tidak dapat terdeteksi oleh

penerima. Keuntungan atau manfaat dari sistem ini dalam penerapannya antara

lain sebagai pengendali jarak jauh, alarm keamanan, otomatisasi pada sistem.

Pemancar pada sistem ini tediri atas sebuah LED infra merah yang dilengkapi

dengan rangkaian yang mampu membangkitkan data untuk dikirimkan melalui sinar

infra merah, sedangkan pada bagian penerima biasanya terdapat foto transistor,

fotodioda, atau inframerah modul yang berfungsi untuk menerima sinar inframerah

yang dikirimkan oleh pemancar. 1. Resistor : R1 (33 K ohm), R2 (1 K ohm), VR1 (Potensio 100 K

ohm) 2. Kapasitor : C1 (100nF) 3. Transistor : Q2 (BC547) 4. Foto transistor : Q1 5. IC : 40106 (Schimitt trigger), 4026 (Decade counter) 6. 7-Segment Prinsip Kerja sensor infrared: Ketika pemancar IR memancarkan radiasi, ia mencapai objek dan beberapa radiasi memantulkan kembali ke penerima IR. Berdasarkan intensitas penerimaan oleh penerima IR, output dari sensor ditentukan. <a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEhBYvvN2GkE4suv9NqtMsVYWi1_ZEvLvZS5fy2lYqQDwhUvD-RepXtQGAq4EElvjF0D98NX3cscbLChI2-UcwrqttNsTp1aGXpEpGpw7tFuWDDT0FZUxLq_PpB6-1ALKeZ71DRklSRCWsCCgB8L0GqVnFBGVn8Dd_BaXugkZK2PtTX_LuLnqEc0dxpm/s842/IMG

_20220527_215955.jpg" style="margin-left: 1em; margin-right: 1em;">

 Rangkaian dasar sensor infrared common emitter yang menggunakan led infrared dan fototransistor
 Prinsip kerja rangkaian sensor infrared berdasarkan pada gambar 2. Adalah ketika cahaya infra merah diterima oleh fototransistor maka basis fototransistor akan mengubah energi cahaya infra merah menjadi arus listrik sehingga basis akan berubah seperti saklar (swith closed) atau fototransistor akan aktif (low) secara sesaat seperti gambar 3

 Grafik Respon Sensor Infrared Grafik dibawah menunjukkan hubungan antara resistansi dan jarak potensial untuk sensitivitas rentang antara pemancar dan penerima inframerah. Resistor yang digunakan pada sensor mempengaruhi intensitas cahaya inframerah keluar dari pemancar. Semakin tinggi resistansi yang

digunakan, semakin pendek jarak IR Receiver yang mampu mendeteksi sinar IR yang dipancarkan dari IR Transmitter karena intensitas cahaya yang lebih rendah dari IR Transmitter. Sementara semakin rendah resistansi yang digunakan, semakin jauh jarak IR Receiver mampu mendeteksi sinar IR yang dipancarkan dari IR Transmitter karena intensitas cahaya yang lebih tinggi dari IR Transmitter
 C.

Sensor

touch

 Touch sensor merupakan sebuah lapisan penerima input dari luar monitor. Input dari touchscreen adalah sebuah sentuhan, maka dari itu sensornya juga merupakan sensor sentuh. Biasanya sensor sentuh berupa sebuah panel terbuat dari kaca yang permukaannya sangat responsif jika disentuh. Touch sensor ini diletakkan di permukaan paling depan dari sebuah layar touchscreen, dengan demikian area yang responsif terhadap sentuhan menutupi area pandang dari layar monitor. Maka dari itu ketika kita menyentuh permukaan layar monitornya, input juga telah diberikan oleh kita. Teknologi touch sensor yang kini banyak digunakan terdiri dari tiga macam, seperti yang telah dijelaskan di atas, yaitu Resistive touchscreen, Capasitive touchscreen, dan Surface

wave touchscreen. Semua jenis sensor ini memiliki cara kerja yang sama, yaitu menangkap perubahan arus dan sinyal-sinyal listrik yang ada pada sensor tersebut, merekamnya dan mengubahnya menjadi titik-titik koordinat yang berada di atas layar, sehingga posisi tepat dari sebuah sentuhan dapat langsung diketahui dengan benar.
 Spesifikasi :
 Berdasarkan

fungsinya, Sensor Sentuh dapat dibedakan menjadi dua jenis utama yaitu

Sensor Kapasitif dan Sensor Resistif. Sensor Kapasitif atau Capacitive

Sensor bekerja dengan mengukur kapasitansi sedangkan sensor Resistif

bekerja dengan mengukur tekanan yang diberikan pada permukaannya. <h3 style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; color: black; font-family: "Open Sans",Helvetica,Arial,sans-serif; font-size: 1.25rem; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: 1.3; margin: 0px 0px 1.25rem; overflow-wrap: break-word; padding: 0px; text-align: start; vertical-align: baseline;"><span style="border-color: initial; border-image: initial; border-style: initial; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; height: auto; line-height: inherit; margin: 1.25rem auto; transition-delay: 0ms; transition-duration: 400ms; transition-property: opacity;"><span style="border-color: initial; border-image: initial; border-style: initial; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; height: auto; line-height: inherit; margin: 1.25rem auto; transition-delay: 0ms; transition-duration: 400ms; transition-property: opacity;"><a href="https://teknikelektronika.com/wp-content/uploads/2020/05/SENSOR-SENTUH-KAPASITIF-DAN-RESISTIF.png?x42748" style="border-color: currentcolor; border-image: none; border-style: none;

border-width: 0px; border: 0px; color: #0053f9; font-family: inherit; font-size: inherit; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"></h3> 1) Sensor Kapasitif Sensor

sentuh Kapasitif merupakan sensor sentuh yang sangat populer pada saat

ini, hal ini dikarenakan Sensor Kapasitif lebih kuat, tahan lama dan

mudah digunakan serta harga yang relatif lebih murah dari sensor

resistif. Ponsel-ponsel pintar saat ini telah banyak yang menggunakan

teknologi ini karena juga menghasilkan respon yang lebih akurat. Berbeda

dengan Sensor Resistif yang menggunakan tekanan tertentu untuk

merasakan perubahan pada permukaan layar, Sensor Kapasitif memanfaatkan

sifat konduktif alami pada tubuh manusia untuk mendeteksi perubahan

layar sentuhnya. Layar sentuh sensor kapasitif ini terbuat dari bahan

konduktif (biasanya Indium Tin Oxide atau

disingkat dengan ITO) yang dilapisi oleh kaca tipis dan hanya bisa

disentuh oleh jari manusia atau stylus khusus ataupun sarung khusus yang

memiliki sifat konduktif. Pada

saat jari menyentuh layar, akan terjadi perubahaan medan listrik pada

layar sentuh tersebut dan kemudian di respon oleh processor untuk

membaca pergerakan jari tangan tersebut. Jadi perlu diperhatikan bahwa

sentuhan kita tidak akan di respon oleh layar sensor kapasitif ini

apabila kita menggunakan bahan-bahan non-konduktif sebagai perantara

jari tangan dan layar sentuh tersebut. 2) Sensor Resistif Tidak

seperti sensor sentuh kapasitif, sensor sentuh resistif ini tidak

tergantung pada sifat listrik yang terjadi pada konduktivitas pelat

logam. Sensor Resistif bekerja dengan mengukur tekanan yang diberikan

pada permukaannya. Karena tidak perlu mengukur perbedaan kapasitansi,

sensor sentuh resistif ini dapat beroperasi pada bahan non-konduktif

seperti pena, stylus atau jari di dalam sarung tangan. Sensor

sentuh resistif terdiri dari dua lapisan konduktif yang dipisahkan oleh

jarak atau celah yang sangat kecil. Dua lapisan konduktif (lapisan atas

dan lapisan bawah) ini pada dasarnya terbuat dari sebuah film.

Film-film umumnya dilapisi oleh Indium Tin Oxide yang merupakan

konduktor listrik yang baik dan juga transparan (bening). Cara

kerjanya hampir sama dengan sebuah sakelar, pada saat film lapisan atas

mendapatkan tekanan tertentu baik dengan jari maupun stylus, maka film

lapisan atas akan bersentuhan dengan film lapisan bawah sehingga

menimbulkan aliran listrik pada titik koordinat tertentu layar tersebut

dan memberikan signal ke prosesor untuk melakukan proses selanjutnya.
 <table align="center" cellpadding="0" cellspacing="0" class="tr-caption-container" style="margin-left: auto; margin-right: auto;"><tbody><tr><td style="text-align: center;"></td></tr><tr><td class="tr-caption" style="text-align: center;">Grafik Respon Sensor Sound</td></tr></tbody></table>
 Grafik touch sensor

 D.

Opamp <img border="0" height="158" src="https://2.bp.blogspot.com/-DgkgTUVOZPo/V3mvnnVdb6I/AAAAAAAABjg/o20vUZMud_8YMGCS34OoYMS76KiMCuLawCLcB/w173-h158/2.-opamp-symbol.jpg" style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px none; box-sizing: border-box;

break-after: page; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; max-width: 100%; opacity: 0.8; outline: medium none; padding: 0px; transition: all 0.2s ease-in 0s; vertical-align: baseline;" width="173" />
 Opamp adalah komponen elektronika yang akan melakukan penguatan

dan penyearah tegangan untuk rangkaian Dalam rangkaian Penguat Inverting ini, Op-amp dihubungkan dengan

umpan balik untuk menghasilkan operasi loop tertutup. Ketika berhadapan dengan

Op-amp ada dua aturan yang sangat penting untuk diingat tentang Op-amp

Inverting, ini adalah: "Tidak ada arus mengalir ke terminal input"

dan bahwa "V1 selalu sama dengan V2".   Karakteristik Op amp   Karakteristik Faktor Penguat atau Gain pada Op-Amp pada umumnya ditentukan oleh Resistor Eksternal yang terhubung diantara Output dan Input pembalik (Inverting Input). Konfigurasi dengan umpan balik negatif (Negative Feedback) ini biasanya disebut dengan Closed-Loop configuration atau Konfigurasi Lingkar Tertutup. Umpan balik negatif ini akan menyebabkan penguatan atau gain menjadi berkurang dan menghasilkan penguatan yang dapat diukur serta dapat dikendalikan. Tujuan pengurangan Gain dari Op-Amp ini adalah untuk menghindari terjadinya Noise yang berlebihan dan juga untuk menghindari respon yang tidak diinginkan. Sedangkan pada Konfigurasi Lingkar Terbuka atau Open-Loop Configuration, besar penguatannya adalah tak terhingga (∞) sehingga besarnya tegangan output hampir atau mendekati tegangan Vcc. <a href="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEhZhUZsaCdXsf_n1-XReafyOXKUX6

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<span
style="font-size: 13.5pt;">
 <p class="MsoListParagraph" style="margin-left:
0.5in; mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span
style="font-size: 13.5pt;">   Secara umum, Operational Amplifier (Op-Amp) yang
ideal memiliki karakteristik sebagai berikut : <p class="MsoListParagraph"
style="margin-left: 0.5in; mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span style="font-family:
times;">   1. Penguatan Tegangan Open-loop atau
Av = ∞ (tak terhingga) <p class="MsoListParagraph" style="margin-left: 0.5in;
mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span style="font-size:
13.5pt;">   2. Tegangan Offset Keluaran (Output Offset Voltage) atau Voo = 0
(nol) <p class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l1 level1 lfo1;
text-indent: -0.25in;">
 3. Impedansi Masukan (Input Impedance) atau Zin= ∞ (tak terhingga) <p
class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span
style="font-family: times;">   4. Impedansi Output
(Output Impedance) atau Zout = 0 (nol) <p class="MsoListParagraph"
style="margin-left: 0.5in; mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span style="font-family:
times;">   5. Lebar Pita (Bandwidth) atau BW = ∞
(tak terhingga) <p class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l1
level1 lfo1; text-indent: -0.25in;"><span style="font-size:
13.5pt;">   6. Karakteristik tidak berubah dengan suhu <p
class="MsoListParagraph" style="margin-left: 0.5in; mso-list: l1 level1 lfo1; text-indent: -0.25in;"><span
style="font-family: times;">   Pada dasarnya,
kondisi Op-Amp ideal hanya merupakan teoritis dan hampir tidak mungkin dicapai dalam kondisi praktis.
Namun produsen perangkat Op-Amp selalu berusaha untuk memproduksi Op-Amp yang mendekati
kondisi idealnya ini. Oleh karena itu, sebuah Op-Amp yang baik adalah Op-Amp yang memiliki
karakteristik yang hampir mendekati kondisi Op-Amp Ideal <p
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<li class="MsoNormal" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 19.8px; margin: 0px 0px 0cm; padding: 0px;">Tegangan Offset Keluaran (Output Offset Voltage) atau Voo = 0 (nol)
<li class="MsoNormal" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 19.8px; margin: 0px 0px 0cm; padding: 0px;">Impedansi Masukan (Input Impedance) atau Zin= ∞ (tak terhingga)
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OpAmp</p><ul style="color: #222222; cursor:
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Open-loop atau Av = ∞ (tak terhingga)
<li style="cursor:
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Keluaran (Output Offset Voltage) atau Voo = 0 (nol)
<li style="cursor:
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(Input Impedance) atau Zin= ∞ (tak terhingga)
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<li style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 0px 0px 0.25em; padding: 0px;">Lebar Pita (Bandwidth) atau BW = ∞ (tak terhingga)
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Amplifier</p><div class="separator" style="clear: both; color: #222222; cursor:
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 E.   Sensor

Hujan

 Sensor hujan

adalah jenis sensor yang berfungsi untuk mendeteksi terjadinya hujan atau

tidak, yang dapat difungsikan dalam

segala macam aplikasi dalam kehidupan sehari -hari. Dipasaran sensor ini dijual

dalam bentuk module sehingga hanya perlu menyediakan kabel jumper untuk

dihubungkan ke mikrokontroler atau Arduino.   Prinsip

kerja dari module sensor ini yaitu pada saat ada air hujan turun dan mengenai

panel sensor maka akan terjadi proses elektrolisasi oleh air hujan. Dan karena

air hujan termasuk dalam golongan cairan elektrolit yang dimana cairan tersebut

akan menghantarkan arus listrik. Pada sensor

hujan ini terdapat ic komparator yang dimana output dari sensor ini dapat

berupa logika high dan low (on atau off). Serta pada modul sensor ini terdapat

output yang berupa tegangan pula. Sehingga dapat dikoneksikan ke pin khusus

Arduino yaitu Analog Digital Converter.

Spesifikasi Sensor

hujan yaitu

1.   Sensor

ini bermaterial dari FR-04 dengan dimensi 5cm x 4cm berlapis nikel dan dengan

kualitas tinggi pada kedua sisinya

2.   Pada

lapisan module mempunyai sifat anti oksidasi sehingga tahan terhadap korosi

3.
Tegangan

kerja masukan sensor 3.3V – 5V

4.
Menggunakan

IC comparator LM393 yang stabil

5.   Output

dari modul comparator dengan kualitas sinyal bagus lebih dari 15mA

6.<span style="font-stretch: normal; font-variant-east-asian: normal;

font-variant-numeric: normal; line-height: normal;">
Dilengkapi

lubang baut untuk instalasi dengan modul lainnya

7.
Terdapat

potensiometer yang berfungsi untuk mengatur sensitifitas sensor

8.
Terdapat

2 Output yaitu digital (0 dan 1) dan analog (tegangan) 9.   Dimensi PCB yaitu 3.2 cm x 1.4 cm
 F.   Sensor pir Sensor PIR atau disebut juga dengan Passive Infra Red merupakan

sensor yang digunakan untuk mendeteksi adanya pancaran sinar infra

merah dari suatu object. Sesuai dengan namanya sensor PIR bersifat

pasif, yang berarti sensor ini tidak memancarkan sinar infra merah

melainkan hanya dapat menerima radiasi sinar infra merah dari luar. Sensor PIR terdiri dari beberapa bagian yaitu :</p> <ul style="line-height: 1.4; margin: 0.5em 0px; padding: 0px 2.5em;"><li style="margin: 0px 0px 0.25em; padding: 0px;">Fresnel Lens -->Lensa

Fresnel pertama kali digunakan pada tahun 1980an. Digunakan sebagai

lensa yang memfokuskan sinar pada lampu mercusuar. Penggunaan paling

luas pada lensa Fresnel adalah pada lampu depan mobil, di mana mereka

membiarkan berkas parallel secara kasar dari pemantul parabola dibentuk

untuk memenuhi persyaratan pola sorotan utama. <li style="margin: 0px 0px 0.25em; padding: 0px;">IR Filter -->IR

Filter dimodul sensor PIR ini mampu menyaring panjang gelombang sinar

infrared pasif antara 8 sampai 14 mikrometer, sehingga panjang gelombang

yang dihasilkan dari tubuh manusia yang berkisar antara 9 sampai 10

mikrometer ini saja yang dapat dideteksi oleh sensor. Sehingga Sensor

PIR hanya bereaksi pada tubuh manusia saja.
<li style="margin: 0px 0px 0.25em; padding: 0px;">Pyroelectric Sensor -->Seperti

tubuh manusia yang memiliki suhu tubuh kira-kira 32 derajat celcius,

yang merupakan suhu panas yang khas yang terdapat pada lingkungan.

Pancaran sinar inframerah inilah yang kemudian ditangkap oleh Pyroelectric sensor yang merupakan inti dari sensor PIR ini sehingga menyebabkan Pyroelectic sensor yang terdiri dari galium nitrida, caesium nitrat dan litium tantalate menghasilkan arus listrik.
<li style="margin: 0px 0px 0.25em; padding: 0px;">Amplifier -->Sebuah sirkuit amplifier yang ada menguatkan arus yang masuk pada material pyroelectric.
<li style="margin: 0px 0px 0.25em; padding: 0px;">Komparator-->Setelah dikuatkan oleh amplifier kemudian arus dibandingkan oleh komparator sehingga mengahasilkan output. <div align="center" class="MsoNormal" style="font-family: Arial,Tahoma,Helvetica,FreeSans,sans-serif; font-size: 16.5px; line-height: normal; margin-bottom:

0.0001pt; text-align: center;"><a
href="https://2.bp.blogspot.com/-ErpjAtPP-XI/Th5pSHkLAJI/AAAAAAAAAEo/tBDHGSTKjeY/s1600/cara-kerja-pir.jpg" style="color: #2ba2af; text-decoration-line: none;"> <table align="center" cellpadding="0" cellspacing="0" class="tr-caption-container" style="margin-left: auto; margin-right: auto;"><tbody><tr><td style="text-align: center;"><a
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Blok Diagram sensor PIR</td></tr></tbody></table>   Sensor

PIR memiliki jangkauan jarak yang bervariasi, tergantung karakteristik

sensor. Proses penginderaan sensor PIR dapat digambarkan sebagai

berikut: <a
href="https://2.bp.blogspot.com/-APpU8BedqT4/Th5pUMjRF_I/AAAAAAAAAEs/KJ4uHJH29ik/s1600/t_11103385_1.jpg" style="color: #2ba2af; text-decoration-line: none;">   <table align="center" cellpadding="0" cellspacing="0" class="tr-caption-container" style="margin-left: auto; margin-right: auto;"><tbody><tr><td style="text-align: center;"><a
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 Pada

umumnya sensor PIR memiliki jangkauan pembacaan efektif hingga 5 meter,

dan sensor ini sangat efektif digunakan sebagai human detector.

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Ic

demuxtiplexer 74155 <img alt="Jual IC TTL 74155, 74LS155: Dual 2-Line to 4-Line Decoders/Demultiplexers - Kota Cimahi - Cimahi Electronic | Tokopedia" class="rg_i Q4LuWd" data-atf="true" data-deferred="1" data-iml="1378.57" height="252" src="

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YlYMAYMGDAGDBgwBgwYMAYMGDAf//Z" width="199" />
 Ic demuxtiplexer 74155 adalah integrated circuit yang bersifat

demuxtiplexer dengan dua bentuk demux input 1 ke 4 dengan input tambahan yaitu

seat A dan B serta adanya enable dan C Demultiplexer adalah

perangkat yang mengambil sinyal input

yang tunggal yang memilih salah satu dari banyak output yang di data baris yang

berhubungan ke input tunggal multimplexer. Satu multiplexer yang banyak dipakai

dengan demultiplexer untuk melengkapkan dan

di ujung penerima. Bentuk multiplexer elektronik yang bisa dianggap

sebagai beberapa masukan tunggal output switch yang demultiplexer sebagai

bentuk masukan tunggak , ganda output switch . Demultiplexer juga bisa diartikan dengan rangkaian logika yang

menerima satu input data yang mendistrubusikan input tersebut yang beberapa

output yang telah disediakan juga merupakan kebalikan multiplexer H.

Diode
 <span

style="font-family: times; font-size: 13.5pt;">Diode adalah komponen elektronika yang akan menyearahkan tegangan dengan

syarat katoda harus lebih kecil dibanding anoda. Dioda (Diode) adalah Komponen Elektronika Aktif yang terbuat dari

bahan semikonduktor dan mempunyai fungsi untuk menghantarkan arus listrik ke

satu arah tetapi menghambat arus listrik dari arah sebaliknya. Oleh karena itu,

Dioda sering dipergunakan sebagai penyearah dalam Rangkaian Elektronika. Dioda

pada umumnya mempunyai 2 Elektroda (terminal) yaitu Anoda (+) dan Katoda (-)

dan memiliki prinsip kerja yang berdasarkan teknologi pertemuan p-n

semikonduktor yaitu dapat mengalirkan arus dari sisi tipe-p (Anoda) menuju ke

sisi tipe-n (Katoda) tetapi tidak dapat mengalirkan arus ke arah sebaliknya.   <a href="https://blogger.googleusercontent.com/img/a/AVvXsEhwnIc7Iz2SDpNon1IfQAO-bDLnFWlCo_CxfbV55PmztYWpdirk9t-jHuHTlyerU4dFey1OQU3_-p0wGZoACNYQoNDmCwuKIMKekUE_9Zu4QcdkKfjlxW56AoaAvx8sTBSo3TqxEptWLKNbfPuB3Z6Uk1tP3j-uOUaDlOytrKKk4jDmDdlSGhQr6kuYbA"

style="margin-left: 1em; margin-right: 1em;">

 <span style="background-color: #ea9999; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;">Secara

sederhana, cara kerja dioda dapat dijelaskan dalam tiga kondisi, yaitu

kondisi tanpa tegangan (unbiased), diberikan tegangan positif (forward

biased), dan tegangan negatif (reverse biased).</p><h3 style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; font-weight: normal; line-height: 1.6; margin: 0px 0px 10px; padding: 0px; position: relative; vertical-align: baseline;">1. Kondisi tanpa tegangan</h3><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;

font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;">Pada

kondisi tidak diberikan tegangan akan terbentuk suatu perbatasan medan

listrik pada daerah P-N junction. Hal ini terjadi diawali dengan proses

difusi, yaitu bergeraknya muatan elektro dari sisi n ke sisi p.

Elektron-elektron tersebut akan menempati suatu tempat di sisi p yang

disebut dengan holes. Pergerakan elektron-elektron tersebut akan

meninggalkan ion positif di sisi n, dan holes yang terisi dengan

elektron akan menimbulkan ion negatif di sisi p. Ion-ion tidak bergerak

ini akan membentuk medan listrik statis yang menjadi penghalang

pergerakan elektron pada dioda.</p><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;"></p><div style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; font-weight: normal; line-height: 1.6; margin: 0px 0px 10px; padding: 0px; position: relative; text-align: left; vertical-align: baseline;">2. Kondisi tegangan positif (Forward-bias) <p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit;

font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;">Pada

kondisi ini, bagian anoda disambungkan dengan terminal positif sumber

listrik dan bagian katoda disambungkan dengan terminal negatif. Adanya

tegangan eksternal akan mengakibatkan ion-ion yang menjadi penghalang

aliran listrik menjadi tertarik ke masing-masing kutub. Ion-ion negatif

akan tertarik ke sisi anoda yang positif, dan ion-ion positif akan

tertarik ke sisi katoda yang negatif. Hilangnya penghalang-penghalang

tersebut akan memungkinkan pergerakan elektron di dalam dioda, sehingga

arus listrik dapat mengalir seperti pada rangkaian tertutup.</p><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;"></p> <span style="background-color: #ea9999; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><h3 style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; font-weight: normal; line-height: 1.6; margin: 0px 0px 10px; padding: 0px; position: relative; vertical-align: baseline;"><span style="cursor:

url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">3. Kondisi tegangan negatif (Reverse-bias)</h3><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;">Pada

kondisi ini, bagian anoda disambungkan dengan terminal negatif sumber

listrik dan bagian katoda disambungkan dengan terminal positif. Adanya

tegangan eksternal akan mengakibatkan ion-ion yang menjadi penghalang

aliran listrik menjadi tertarik ke masing-masing kutub. Pemberian

tegangan negatif akan membuat ion-ion negatif tertarik ke sisi katoda

(n-type) yang diberi tegangan positif, dan ion-ion positif tertarik ke

sisi anoda (p-type) yang diberi tegangan negatif. Pergerakan ion-ion

tersebut searah dengan medan listrik statis yang menghalangi pergerakan

elektron, sehingga penghalang tersebut akan semakin tebal oleh ion-ion.

Akibatnya, listrik tidak dapat mengalir melalui dioda dan rangkaian

diibaratkan menjadi rangkaian terbuka.</p><p style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 20px; padding: 0px; vertical-align: baseline;"><img alt="kondisi tegangan negatif" class="aligncenter size-full wp-image-1448 jetpack-lazy-image jetpack-lazy-image--handled" data-lazy-loaded="1" data-recalc-dims="1" height="185" src="https://i2.wp.com/www.studiobelajar.com/wp-content/uploads/2017/07/kondisi-tegangan-negatif.jpeg?resize=387%2C257" style="background: rgb(255, 255, 255) none repeat scroll 0% 0%; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; box-shadow: 1px 1px 5px rgba(0, 0, 0, 0.1); cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; display: block; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; height: auto; line-height: inherit; margin: 0px auto; max-width: 100%; padding: 0px; vertical-align: baseline;"

width="280" /></p> <div style="cursor:
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url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: bold;"><p style="-webkit-font-smoothing: antialiased !important; backface-visibility: hidden; box-sizing: border-box; color: #2c3e50; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; margin: 0px 0px 15px; overflow-wrap: break-word; text-shadow: 1px 1px 1px rgba(0, 0, 0, 0.024);"><source style="-webkit-font-smoothing: antialiased !important; backface-visibility: hidden; box-sizing: border-box; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-shadow: 1px 1px 1px rgba(0, 0, 0, 0.024);" type="image/webp"></source> </h2></h3> <div class="separator" style="clear: both; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: bold;"><p style="-webkit-font-smoothing: antialiased !important; backface-visibility: hidden; box-sizing: border-box; color: #2c3e50; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; margin: 0px 0px 15px; overflow-wrap: break-word; text-shadow: 1px 1px 1px rgba(0, 0, 0, 0.024);">
 </h2>   I.

Transistor
 Transistor adalah komponen elektronika yang memiliki 3 terminal yaitu

terminal base , collector , emitor . tegangan akan masuk ke relay saat terminal

base tidak dialiri tegangan Transistor bipolar memiliki 2 junction yang dapat disamakan dengan

penggabungan 2 buah dioda. Emiter-Base adalah satu junction dan Base-Kolektor

junction lainnya itulah kenapa disebut (Bipolar Junction Transistor). Seperti

pada dioda, arus hanya akan mengalir hanya jika diberi bias positif, yaitu

hanya jika tegangan pada material P lebih positif daripada material N (forward

bias). Pada gambar ilustrasi transistor NPN berikut ini, junction base-emiter

diberi bias positif sedangkan basecolector mendapat bias negatif (reverse

bias). Jika misalnya tegangan base-emitor dibalik (reverse bias), maka

tidak akan terjadi aliran elektron dari emitor menuju kolektor. Jika pelan-pelan

‘keran’ base diberi bias maju (forward bias), elektron mengalir menuju kolektor

dan besarnya sebanding dengan besar arus bias base yang diberikan. Dengan kata

lain, arus base mengatur banyaknya electron yang mengalir dari emiter menuju

kolektor. Pada transistor NPN, semikonduktor tipe-P diapit oleh dua semikonduktor tipe-N. Transistor NPN juga dapat dibentuk dengan menghubungkan anoda dari dua dioda sebagai base dan katoda sebagai kolektor dan emitor. Arus mengalir dari kolektor ke emitor karena potensial kolektor

lebih besar daripada base dan emitor Pada transistor PNP, semikonduktor tipe-N diapit oleh dua semikonduktor tipe-P. Transistor PNP juga dapat dibentuk dengan menghubungkan katoda dari dua dioda sebagai base dan anoda sebagai kolektor dan emitor. Hubungan emitter-base foward bias sementara collector-base reverse bias. Jadi, arus mengalir dari emitor ke kolektor karena potensial emitor lebih besar daripada base dan kolektor.
 <div style="color: #373b41; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 700; text-align: center;"><p class="MsoNormal" style="color: #666666; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; line-height: normal; margin-left: 54pt; text-align: start;"><span style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">Rumus dari Transitor adalah :</p><p align="center" class="MsoNormal" style="color: #666666; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; line-height: normal; margin-bottom: 0cm;"><span lang="SV" style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">h_{<span lang="SV" style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">FE}<span lang="SV" style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> = iC/iB<span style="background-color: #e3a327; color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"></p><p class="MsoNormal" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; color: #666666; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; line-height: 11.2pt; margin-bottom: 0cm; margin-left: 36pt; text-align: justify;"><span lang="SV" style="color: #333333; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">dimana, iC = perubahan arus kolektor<span style="color: black; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"> </p><p class="MsoNormal" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; color: #666666; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; line-height: 11.2pt; margin-bottom: 0cm; margin-left: 36pt; text-align: justify; text-indent: 42pt;">iB = perubahan arus basis </p><p class="MsoNormal" style="background-attachment: initial; background-clip: initial; background-image: initial; background-origin: initial; background-position: initial; background-repeat: initial; background-size: initial; color: #666666; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400; line-height: 11.2pt; margin-bottom: 0cm; margin-left: 36pt; text-align: justify; text-indent: 42pt;">h_{FE} = arus yang dicapai</p> <br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /> <div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align:

center;"> <span face="Arial, Tahoma, Helvetica, FreeSans, sans-serif" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: start;">Rumus dari Transitor adalah :
<h4 style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; margin: 0px; position: relative;"> <span style="color: #333333; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; font-weight: 400;"><br style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;" /> Gelombang I/O Transistor <div style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; text-align: left;"> </h4>   J.

Relay
 Relay adalah komponen elektronika yang akan menutup rangkaian jika

relay dialiri tegangan Prinsipo kerjanya yaitu sebuah Besi (Iron Core) yang dililit oleh

sebuah kumparan Coil yang berfungsi untuk mengendalikan Besi tersebut. Apabila

Kumparan Coil diberikan arus listrik, maka akan timbul gaya Elektromagnet yang

kemudian menarik Armature untuk berpindah dari Posisi sebelumnya (NC) ke posisi

baru (NO) sehingga menjadi Saklar yang dapat menghantarkan arus listrik di

posisi barunya (NO). Posisi dimana Armature tersebut berada sebelumnya (NC)

akan menjadi OPEN atau tidak terhubung. Pada saat tidak dialiri arus listrik,

Armature akan kembali lagi ke posisi Awal (NC). Coil yang digunakan oleh Relay

untuk menarik Contact Poin ke Posisi Close pada umumnya hanya membutuhkan arus

listrik yang relatif kecil. Ada besi atau yang disebut dengan nama inti besi dililit oleh sebuah kumparan yang berfungsi sebagai pengendali. Sehingga kumparan kumparan yang diberikan arus listrik maka akan menghasilkan gaya elektromagnet. Gaya tersebut selanjutnya akan menarik angker untuk pindah dari biasanya tutup ke buka normal. Dengan demikian saklar menjadi pada posisi baru yang biasanya terbuka yang dapat menghantarkan arus listrik. Ketika armature sudah tidak dialiri arus listrik lagi maka ia akan kembali pada posisi awal, yaitu normal
 <p style="background-color: white; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 1.25rem; padding: 0px; vertical-align: baseline;">Kontak Poin (Contact Point) Relay terdiri dari 2 jenis yaitu : <ul style="background-color: white; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; list-style: outside none square; margin: 0px 0px 1.25rem 2.5rem; padding: 0px; vertical-align: baseline;"><li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px;

vertical-align: baseline;">Normally Close (NC) yaitu kondisi awal sebelum diaktifkan akan selalu berada di posisi CLOSE (tertutup)
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Normally Open (NO) yaitu kondisi awal sebelum diaktifkan akan selalu berada di posisi OPEN (terbuka)
<p style="background-color: white; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 1.25rem; padding: 0px; vertical-align: baseline;">Berdasarkan

gambar diatas, sebuah Besi (Iron Core) yang dililit oleh sebuah

kumparan Coil yang berfungsi untuk mengendalikan Besi tersebut.

Berdasarkan penggolongan jumlah Pole dan Throw-nya sebuah relay, maka

relay dapat digolongkan menjadi :</p><ul style="background-color: white; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; list-style: outside none square; margin: 0px 0px 1.25rem 2.5rem; padding: 0px; vertical-align: baseline;"><li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><i style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Single Pole Single Throw (SPST)</i> : Relay golongan ini memiliki 4 Terminal, 2 Terminal untuk Saklar dan 2 Terminalnya lagi untuk Coil.
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><i style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Single Pole Double Throw (SPDT</i>) : Relay golongan ini memiliki 5 Terminal, 3 Terminal untuk Saklar dan 2 Terminalnya lagi untuk Coil.
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><i style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Double Pole Single Throw (DPST)</i> :

Relay golongan ini memiliki 6 Terminal, diantaranya 4 Terminal yang

terdiri dari 2 Pasang Terminal Saklar sedangkan 2 Terminal lainnya untuk

Coil. Relay DPST dapat dijadikan 2 Saklar yang dikendalikan oleh 1

Coil.
<li style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><i style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Double Pole Double Throw (DPDT)</i> :

Relay golongan ini memiliki Terminal sebanyak 8 Terminal, diantaranya 6

Terminal yang merupakan 2 pasang Relay SPDT yang dikendalikan oleh 1

(single) Coil. Sedangkan 2 Terminal lainnya untuk Coil. <p style="background-color: white; border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 1.25rem; padding: 0px; vertical-align: baseline;">Untuk lebih jelas mengenai Penggolongan Relay berdasarkan Jumlah Pole dan Throw, silakan lihat gambar dibawah ini :
 K.

LED
 Light

Emitting Diode atau sering disingkat dengan LED adalah komponen

elektronika yang dapat memancarkan cahaya monokromatik ketika diberikan

tegangan maju. LED merupakan keluarga Dioda yang terbuat dari bahan

semikonduktor. Warna-warna Cahaya yang dipancarkan oleh LED tergantung

pada jenis bahan semikonduktor yang dipergunakannya. LED juga dapat

memancarkan sinar inframerah yang tidak tampak oleh mata seperti yang

sering kita jumpai pada Remote Control TV ataupun Remote Control

perangkat elektronik lainnya. Bentuk

LED mirip dengan sebuah bohlam (bola lampu) yang kecil dan dapat

dipasangkan dengan mudah ke dalam berbagai perangkat elektronika.

Berbeda dengan Lampu Pijar, LED tidak memerlukan pembakaran filamen

sehingga tidak menimbulkan panas dalam menghasilkan cahaya. Oleh karena

itu, saat ini LED (Light Emitting Diode) yang bentuknya kecil telah

banyak digunakan sebagai lampu penerang dalam LCD TV yang mengganti

lampu tube. LED hanya akan memancarkan cahaya apabila dialiri tegangan maju (bias forward) dari Anoda menuju ke Katoda. Keanekaragaman

Warna pada LED tersebut tergantung pada wavelength (panjang gelombang)

dan senyawa semikonduktor yang dipergunakannya. Berikut ini adalah Tabel

Senyawa Semikonduktor yang digunakan untuk menghasilkan variasi warna

pada LED : <table style="border-bottom-color: initial; border-bottom-style: initial; border-collapse: collapse; border-image: initial; border-left-color: rgb(235, 235, 235); border-left-style: solid; border-left: 1px solid rgb(235, 235, 235); border-right-color: initial; border-right-style: initial; border-spacing: 0px; border-top-color: rgb(235, 235, 235); border-top-style: solid; border-top: 1px solid rgb(235, 235, 235); border-width: 1px 0px 0px 1px; color: black; font-stretch: inherit; font-variant-east-asian: inherit; font-variant-numeric: inherit; line-height: inherit; margin: 0px 0px 1.25rem; padding: 0px; vertical-align: baseline; width: 678px;"><tbody style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301"><b style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Bahan Semikonduktor</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96"><b style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Wavelength</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102"><b style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;">Warna</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial;

border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Gallium Arsenide (GaAs)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">850-940nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Infra Merah</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Gallium Arsenide Phosphide (GaAsP)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">630-660nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Merah</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235);

border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Gallium Arsenide Phosphide (GaAsP)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">605-620nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Jingga</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Gallium Arsenide Phosphide Nitride (GaAsP:N)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">585-595nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Kuning</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235);

border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Aluminium Gallium Phosphide (AlGaP)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">550-570nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Hijau</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Silicon Carbide (SiC)</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="96">430-505nm</td><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="102">Biru</td></tr><tr style="border-color: currentcolor; border-image: none; border-style: none; border-width: 0px; border: 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 0px; vertical-align: baseline;"><td style="border-bottom-color: rgb(235, 235, 235); border-bottom-style: solid; border-bottom: 1px solid rgb(235, 235, 235); border-image: initial; border-left-color: initial; border-left-style: initial; border-right-color: rgb(235, 235, 235); border-right-style: solid; border-right: 1px

solid rgb(235, 235, 235); border-top-color: initial; border-top-style: initial; border-width: 0px 1px 1px 0px; font-stretch: inherit; font-style: inherit; font-variant: inherit; font-weight: inherit; line-height: inherit; margin: 0px; padding: 5px 10px; vertical-align: baseline;" width="301">Gallium Indium Nitride (GaInN)
</td></tr></tbody></table>   L.

Motor

DC
 Motor DC adalah komponen elektronika yang akan berputar sesuai

dengan rotasi dan akan berputar jika adanya gaya medan magnet pada motor Pada prinsipnya motor listrik DC menggunakan fenomena elektromagnet untuk bergerak, ketika arus listrik diberikan ke kumparan, permukaan kumparan yang bersifat utara akan bergerak menghadap ke magnet yang berkutub selatan dan kumparan yang bersifat selatan akan bergerak menghadap ke utara magnet. Saat ini, karena kutub utara kumparan bertemu dengan kutub selatan magnet ataupun kutub selatan kumparan bertemu dengan kutub utara magnet maka akan terjadi saling tarik menarik yang menyebabkan pergerakan kumparan berhenti <img border="0" data-original-height="744" data-original-width="1080" height="220" src="https://blogger.googleusercontent.com/img/b/R29vZ2xl/AVvXsEg72qJEBsLlwp13sH7KNEM-Tm80jO

ekXdpFkE1JLDyz4V3ljqndt899Ha1BNkrU-2SURVBqN4jvcYuFXLQlJRxEXlCKvT7oysGOAxKbkefw4lXKYV3YYq E2xacAUOUSAdp4PAy8QHujbyThpykmfJd7DnO9pjYY-Ea5AgNACwTP9_LAxHGLJTs5NXA5/s320/IMG_2022 0527_232006.jpg" width="320" />

 Untuk menggerakannya lagi, tepat pada saat kutub kumparan berhadapan dengan kutub magnet, arah arus pada kumparan dibalik. Dengan demikian, kutub utara kumparan akan berubah menjadi kutub selatan dan kutub selatannya akan berubah menjadi kutub utara. Pada saat perubahan kutub tersebut terjadi, kutub selatan kumparan akan berhadap dengan kutub selatan magnet dan kutub utara kumparan akan berhadapan dengan kutub utara magnet. Karena kutubnya sama, maka akan terjadi tolak menolak sehingga kumparan bergerak memutar hingga utara kumparan berhadapan dengan selatan magnet dan selatan kumparan berhadapan dengan utara magnet. Pada saat ini, arus yang mengalir ke kumparan dibalik lagi dan kumparan akan berputar lagi karena adanya perubahan kutub. Siklus ini akan berulang-ulang hingga arus listrik pada kumparan diputuskan Dengan prinsip kerja di atas tentu tidak heran jika motor DC juga

disebut sebagai perangkat elektromekanis. Karena pada dasarnya perangkat

tersebut memang menggunakan medan magnet dan konduktor. Utamanya yakni dalam

proses menghasilkan energi mekanik atau gerak yang ada pada perangkat

elektronik tertentu

      M. Resistor <p style="background-color: white;

color: #202122; margin: 0.5em 0px;">Resistor merupakan komponen elektronik yang memiliki dua pin dan didesain untuk mengatur tegangan listrik dan arus listrik. Resistor mempunyai nilai resistansi (tahanan) tertentu yang dapat memproduksi tegangan listrik di

antara kedua pin dimana nilai tegangan terhadap resistansi tersebut

berbanding lurus dengan arus yang mengalir, berdasarkan persamaan hukum Ohm: <dl style="background-color: white; color: #202122; margin-bottom: 0.5em; margin-top: 0.2em;"><dd style="margin-bottom: 0.1em; margin-left: 1.6em; margin-right: 0px;"></dd></dl> Resistor digunakan sebagai bagian dari rangkaian elektronik dan sirkuit elektronik,

dan merupakan salah satu komponen yang paling sering digunakan.

Resistor dapat dibuat dari bermacam-macam komponen dan film, bahkan

kawat resistansi (kawat yang dibuat dari paduan resistivitas tinggi

seperti nikel-kromium). <span style="font-family:

times;">Karakteristik utama dari resistor adalah resistansinya dan daya listrik yang dapat dihantarkan. Karakteristik lain termasuk koefisien suhu, derau listrik (noise), dan induktansi. Resistor dapat diintegrasikan kedalam sirkuit hibrida dan papan sirkuit cetak, bahkan sirkuit terpadu.

Ukuran dan letak kaki bergantung pada desain sirkuit, kebutuhan daya

resistor harus cukup dan disesuaikan dengan kebutuhan arus rangkaian

agar tidak terbakar. Sebagian besar resistor yang kamu lihat akan memiliki empat pita berwarna . Begini cara mereka membacanya : 1. Dua pita pertama menentukan nilai dari resistansi 2. Pita ketiga menentukan faktor pengali, yang akan memberikan nilai resistansi. <span

style="font-family: times;">3. Dan terakhir, pita keempat menentukan nilai toleransi.

<p class="MsoListParagraphCxSpFirst" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"><!--[if !supportLists]-->4.

<!--[endif]-->Percobaan

[kembali] <p class="MsoListParagraphCxSpFirst" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"> <p class="MsoListParagraphCxSpFirst" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"> a. prosedur percobaan
 <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"),

url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 18.4px;">   1. Siapkan semua alat dan bahan yang diperlukan <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 18.4px;">   2. Disarankan agar membaca datasheet setiap komponen <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;"><span face=""Arial","sans-serif"" style="cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto; line-height: 18.4px;">   3. Cari kompnen yang diperlukan di library proteus <p class="MsoNormal" style="background-color: white; cursor: url("https://ani.cursors-4u.net/games/gam-16/gam1571.ani"), url("https://ani.cursors-4u.net/games/gam-16/gam1571.png"), auto;">   4. Pasang dan simulasikan rangkaian tersebut <o:p></o:p>

<p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;"><span style="color: black; font-family: "Times New Roman","serif"; mso-bidi-font-size: 12.0pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;"> <span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;">b. rangkaian simulasi. <p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"><span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;">
 <div class="separator" style="clear: both;

text-align: center;">

<p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;"><!--[if !supportLists]-->c. prinsip kerja Pada saat Sensor soil masture

akan aktif pada saat tanah dalam keadaan basah. Dan rain sensor tidak aktif. Pada

saat aktif sensor akan berlogika 1 dan akan masuk ke pada IC 7483 akan yang

membuat pin A1 akan aktif yang dimana outputnya akan berlogika 0 pada s2 dan s1

akan berlogika 1 dan membuat A0 dan B0 akan berlogika berbeda yang dimana A0

akan berlogika 1 dan B0 yang akan berlogika 0 sehingga pada IC 7485 akan

berlogika 1 pada pin QA>B sehingga akan mengaktifkan relay dan menghidupkan

motor utnuk penyemprotan. Pada saat Sensor rain

aktif pada saat hujan Dan soil masture tidak aktif. Pada saat aktif sensor akan

berlogika 1 dan akan masuk ke pada IC 7483 akan yang membuat pin A2 akan aktif

yang dimana outputnya akan berlogika 1 pada s2 dan s1 akan berlogika 0 dan membuat

A0 dan B0 akan berlogika berbeda yang dimana A0 akan berlogika 0 dan B0 yang

akan berlogika 1 sehingga pada IC 7485 akan berlogika 1 pada pin QA<B sehingga

akan mengaktifkan relay dan menghidupkan motor untuk membuka pintu Pada saat Sensor rain

aktif pada saat hujan Dan soil masture aktif. Pada saat aktif kedua sensor akan berlogika

1 dan akan masuk ke pada IC 7483 akan yang membuat pin A2 dan A1 akan aktif

yang dimana outputnya akan berlogika 1 maka s2 dan s1 akan berlogika 1 sehingga

pada IC 7485 akan berlogika 1 pada pin QA=B sehingga akan mengaktifkan relay dan

menghidupkan motor untuk menutup pintu dan menyalakan lampu. <p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;">Pada saat Sensor infrared

aktif maka B1 akan berlogika 1 pada IC 7483 dan membuat outpu S1 berlogika 1

dan akan membuka gorden dan pada saat sensor pir mendeteksi maka goreden

menutup. Kemudian pada saat ingin mematikan system otomatis ruangan tinggal

menyentuh sensor touch<span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;"> <p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;"><span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;"> <p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;"><span style="color: black; font-family: "Times New Roman","serif"; font-size: 12pt; mso-fareast-font-family: "Times New Roman"; mso-fareast-language: IN;">d. Video simulasi <o:p></o:p> <p class="MsoListParagraphCxSpMiddle" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent:

-21.3pt;">

<p class="MsoListParagraphCxSpLast" style="line-height: normal; margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm 51.06pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-align: left; text-indent: -21.3pt;"><!--[if !supportLists]-->e. File download <o:p></o:p>
 <li style="text-align: left;">Download HMTL klik disini
<li style="text-align: left;">Download Gambar Rangkaian klik disini
<li style="text-align: left;">Download Video Simulasi klik disini
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<li style="text-align: left;">Download Datasheet Sensor Infared klik disini
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<li style="text-align: left;">Download Datasheet Baterai <a

href="https://drive.google.com/uc?export=download&id=1RNESFbgt_bcO3wA3udA2Z9i7J1Ax324Z
">klik disini <p class="MsoListParagraphCxSpLast" style="line-height: normal;
margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm
21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"><span style="color: #333333;
font-family: times;">
</p><p class="MsoListParagraphCxSpLast" style="line-height: normal;
margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm
21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"><span style="color: #333333;
font-family: times;">
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margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm
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font-family: times;">
</p><p class="MsoListParagraphCxSpLast" style="line-height: normal;
margin-bottom: 0cm; margin-left: 21.3pt; margin-right: 0cm; margin-top: 0cm; margin: 0cm 0cm 0cm
21.3pt; mso-add-space: auto; mso-list: l2 level1 lfo1; text-indent: -21.3pt;"><span style="color: #333333;
font-family: times;">
</p>

[menuju awal] <div class="separator" style="clear: both;
text-align: center;">

