

green white gray

N-Ch Depletion mode MOSFET

Red-S Green-D Blue-G

$V_{gs(on)} = -1.927V$  at  $I_d = 5.00mA$  and  $I_g = 1\mu A$

$V_{gs(off)} = -2.431V$  at  $I_d = 5.1\mu A$

$g_m = 35.5mA/V$  at  $I_d = 3.0mA$  to  $5.0mA$

$R_{ds(on)} = 13.8\Omega$  at  $I_d = 5.0mA$  and  $V_{gs} = 8.0V$

with body diode

Peak DCA Pro

DCA Pro Data Graph Help

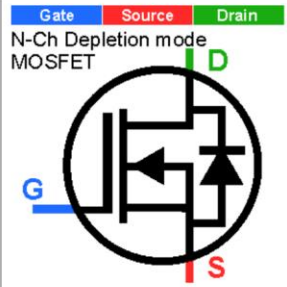
Component name green white gray # 0

Identify MOSFET  $I_d / V_{ds}$  MOSFET  $I_d / V_{gs}$

Test

green white gray  
N-Ch Depletion mode MOSFET  
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 $V_{gs(on)} = -1.927V$  at  $I_d = 5.00mA$  and  $I_g = 1\mu A$   
 $V_{gs(off)} = -2.431V$  at  $I_d = 5.1\mu A$   
 $g_m = 35.5mA/V$  at  $I_d = 3.0mA$  to  $5.0mA$   
 $R_{ds(on)} = 13.8\Omega$  at  $I_d = 5.0mA$  and  $V_{gs} = 8.0V$   
with body diode

N-Ch Depletion mode MOSFET



- "Depletion mode" means that the gate voltage needs to be lower than the source voltage (for N-Ch types) to turn the device fully off.
- The gate "on" threshold is determined when drain current is  $5.0mA \pm 0.25mA$ .
- Gate threshold voltage accuracy is typically  $\pm 2\% \pm 0.01V$ .
- Transconductance is measured for a typical range of drain current from  $3mA$  to  $5mA$ .
- Transconductance is generally much larger at higher drain currents, particularly for power MOSFETs.
- Transconductance accuracy is typically  $\pm 5\% \pm 2mA/V$  for values less than  $20mA/V$ .
- Transconductance accuracy is typically  $\pm 10\% \pm 5mA/V$  for values more than  $20mA/V$ .
- Most MOSFETs have a "body diode" between the source and drain terminals.
- $R_{ds(on)}$  will be measured at the test conditions displayed. Measurement resolution for  $R_{ds(on)}$  is typically  $< 0.5\Omega$ . Values less than  $1.0\Omega$  will be displayed as  $R_{ds(on)} < 1.0\Omega$ .

DCA Pro connected Loaded 4 traces. N-Ch Depletion mode MOSFET

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