

isc N-Channel MOSFET Transistor

RD3G400GN

FEATURES

- Drain Current –I_D= 40A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}= 40V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)} = 7.5m \Omega$ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

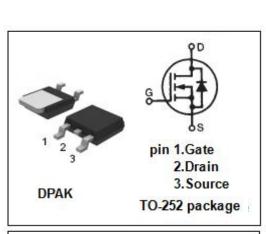
• Designed for use in switch mode power supplies and general purpose applications.

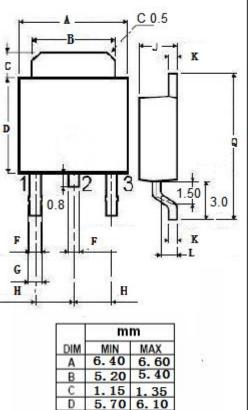
| ADSOLUTE WAATWOW RATINGS(Ta-25 C) | | | | | | |
|-----------------------------------|--|---------|------|--|--|--|
| SYMBOL | PARAMETER VA | | UNIT | | | |
| V _{DSS} | Drain-Source Voltage 40 | | V | | | |
| V _{GS} | Gate-Source Voltage-Continuous ±20 | | V | | | |
| ID | Drain Current-Continuous 40 | | А | | | |
| I _{DM} | Drain Current-Single Pluse | 80 | A | | | |
| P _D | Total Dissipation @T _c =25°C 26 | | W | | | |
| TJ | Max. Operating Junction Temperature | 150 | °C | | | |
| T _{stg} | Storage Temperature | -55~150 | °C | | | |

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 4.8 | °C/W |





0.65

2.10

0.40

0.90

0.75

2.50

2.40

0.60

¹ isc & iscsemi is registered trademark

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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | МАХ | UNIT |
|----------------------|---------------------------------|--|-----|------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 1mA | 40 | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 1mA | 1.0 | 2.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 40A | | 7.5 | mΩ |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±20V;V _{DS} = 0 | | ±500 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} = 40V; V _{GS} = 0 | | 1 | μA |
| V _{SD} | Forward On-Voltage | I _S = 21A; V _{GS} = 0 | | 1.2 | V |

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