

isc N-Channel MOSFET Transistor

RD3U060CN

FEATURES

- Drain Current –I_D= 6A@ T_C=25 $^\circ\!\!\mathbb{C}$
- Drain Source Voltage-: V_{DSS}= 250V(Min)
- Static Drain-Source On-Resistance
- : $R_{DS(on)}$ = 530m Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

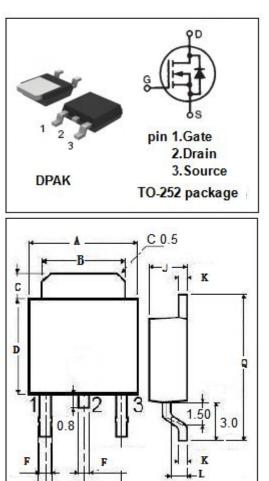
• Designed for use in switch mode power supplies and general purpose applications.

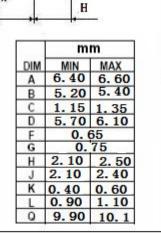
| ABSOLUTE MAXIMUM RATINGS(Ta=25 C) | | | | | | |
|-----------------------------------|--|-------|------|--|--|--|
| SYMBOL | PARAMETER | VALUE | UNIT | | | |
| V _{DSS} | Drain-Source Voltage | 250 | V | | | |
| V _{GS} | Gate-Source Voltage-Continuous | ±30 | V | | | |
| ID | Drain Current-Continuous | 6 | A | | | |
| I _{DM} | Drain Current-Single Pluse | 24 | A | | | |
| P _D | Total Dissipation @T _c =25℃ | 52 | w | | | |
| TJ | Max. Operating Junction Temperature | 150 | °C | | | |
| T _{stg} | torage 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 | 2.36 | °C/W |





isc website: <u>www.iscsemi.com</u>

¹ *isc & iscsemi* is registered trademark

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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | МАХ | UNIT |
|----------------------|---------------------------------|--|-----|------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 1mA | 250 | | V |
| V _{GS} (th) | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 1mA | 3 | 5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 3A | | 530 | mΩ |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±30V;V _{DS} = 0 | | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} = 250V; V _{GS} = 0 | | 10 | μA |
| V _{SD} | Forward On-Voltage | I _S = 6A; V _{GS} = 0 | | 1.5 | V |

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