

INCHANGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

APT8075BVR

FEATURES

- Drain Current –I_D=12A@ T_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage-: V_{DSS}=800V(Min)
- Static Drain-Source On-Resistance
- : R_{DS(on)} =0.75 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

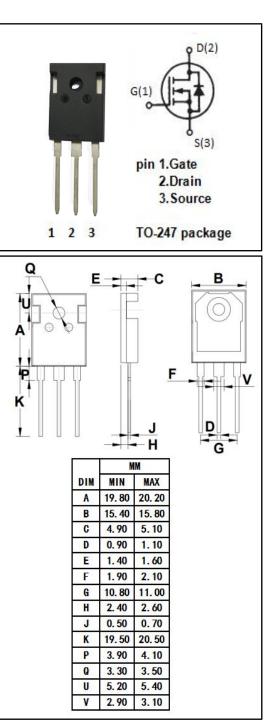
Designed for use in switch mode power supplies and general purpose applications.



| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|-------------------------------------|---------|------|
| V _{DSS} | Drain-Source Voltage | 800 | V |
| V _{GS} | Gate-Source Voltage-Continuous | ±30 | V |
| ID | Drain Current-Continuous | 12 | A |
| I _{DM} | Drain Current-Single Pluse | 48 | А |
| PD | Total Dissipation @Tc=25°C 260 | | W |
| TJ | Max. Operating Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature -55~150 | | °C |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|------|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 0.48 | °C/W |





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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 = 0.25mA | 800 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = V _{GS} ; I _D = 1mA | 2 | 4 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D =6A | | 0.75 | Ω |
| lgss | Gate-Body Leakage Current | V _{GS} = ±30V;V _{DS} = 0 | | ±100 | nA |
| I _{DSS} | Zero Gate Voltage Drain Current | V_{DS} = 600V; V_{GS} = 0 V_{DS} = 480V; V_{GS} = 0@T _C =125°C | | 25 250 | μA |
| V _{SD} | Forward On-Voltage | I _S =-12A; V _{GS} = 0 | | 1.3 | V |

NOTICE:

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