

Schottky Barrier Rectifier

MS1004

FEATURES

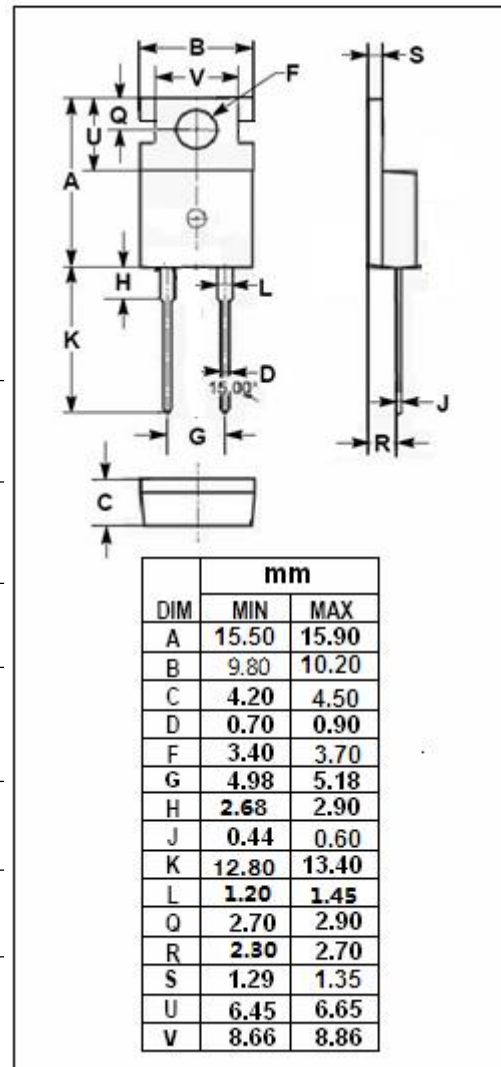
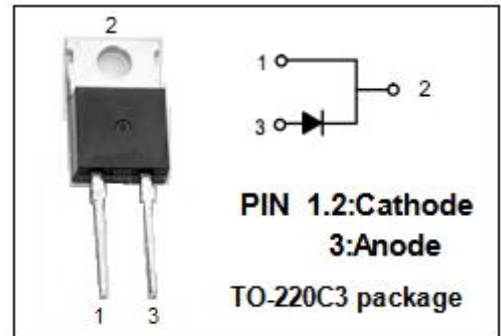
- Guard -Ring for Stress Protection
- Low Forward Voltage
- High Operating Junction Temperature
- Low Power Loss/High Efficiency
- High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	40	V
IF(AV)	Average Rectified Forward Current) TC= 125°C	10	A
IFSM	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	225	A
TJ	Junction Temperature	-55~175	°C
Tstg	Storage Temperature Range	-55~175	°C
dv/dt	Voltage Rate of Change (Rated VR)	10,000	V/μs



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.5	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle ≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 10A ; T _C = 25°C I _F = 10A ; T _C = 175°C	0.65 0.48	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 125°C	0.25 10	mA

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