

Schottky Barrier Rectifier

MBR20200CT

FEATURES

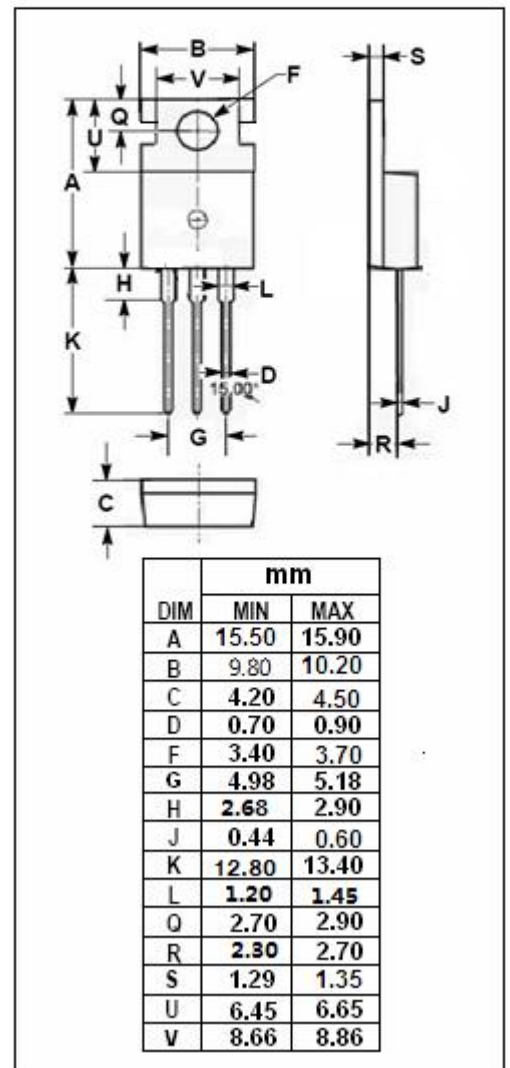
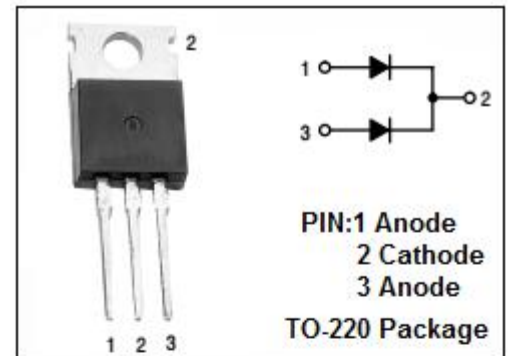
- Guard -Ring for Stress Protection
- Low Forward Voltage
- High Operating Junction Temperature
- Low Power Loss/High Efficiency
- High surge capability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 125°C	10	A
I _{FRM}	Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz) T _C = 90°C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	10,000	V/ μ s



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.0	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μs, 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 = 125°C I _F = 20A ; T _C = 25°C I _F = 20A ; T _C = 125°C	0.9 0.8 1.0 0.9	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 125°C	0.1 5.0	mA

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