

Schottky Barrier Rectifier

MBR1545CT

FEATURES

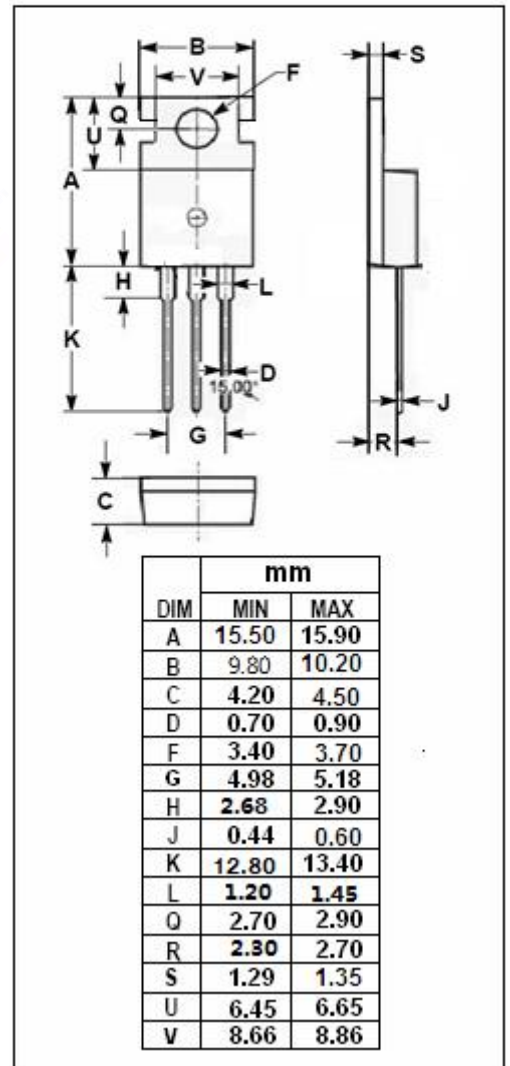
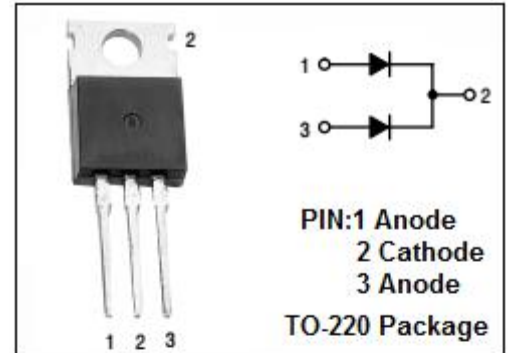
- Center-Tap Configuration
- Guardring for Stress protection
- Low Forward Voltage
- High Operating Junction Temperature
- Guaranteed Reverse Avalanche
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	45	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R)	7.5	A
I _{FRM}	Peak Repetitive Forward Current (Rated V _R , Square Wave, 20kHz) T _C = 105°C	15	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
I _{RRM}	Peak Repetitive Reverse Surge Current (20 μs, 1.0kHz)	1.0	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)	1000	V/μs



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SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.0	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	60	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle ≤ 2.0%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 7.5A ; T _C = 125°C I _F = 15A ; T _C = 25°C I _F = 15A ; T _C = 125°C	0.57 0.84 0.72	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 25°C	0.1 15	mA