

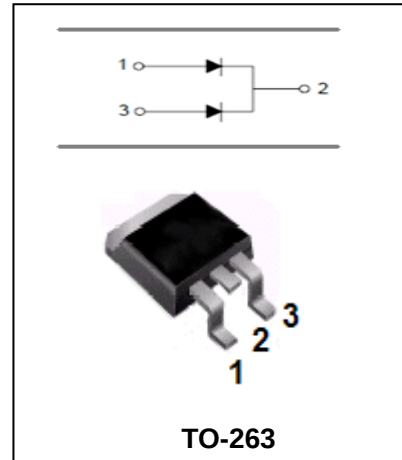
Schottky Barrier Rectifier MBRB10150CT...MBRB10200CT

FEATURES

- Metal-Semiconductor junction with guard ring.
- Epitaxial construction.
- Low forward voltage drop, low switching losses.
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- The plastic material carries U/L recognition 94V-0.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRB10150CT	MBRB10200CT	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	150	200	V
V_{RMS}	RMS Reverse Voltage	105	140	V
V_{DC}	DC Blocking Voltage	150	200	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^{\circ}C$	10		A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	120		A
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	1.5		$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150		$^{\circ}C$

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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MBRB10150CT	MBRB10200CT	UNIT
			MAX		
Reverse Current	I _R	V _R =V _{RRM} , T _A =25°C V _R =V _{RRM} , T _A =125°C	0.1 50		mA
Forward Voltage	V _F	I _F =5A	0.90	0.95	V

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 – FORWARD CURRENT DERATING CURVE

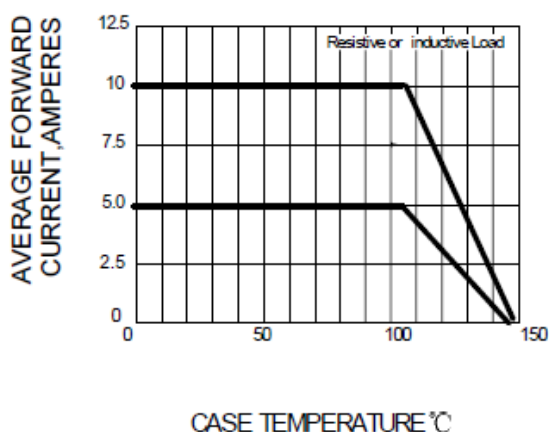
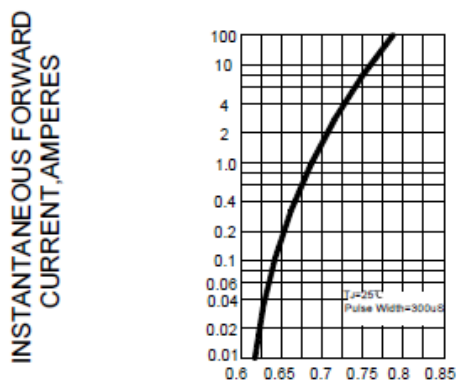


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PER LEG



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

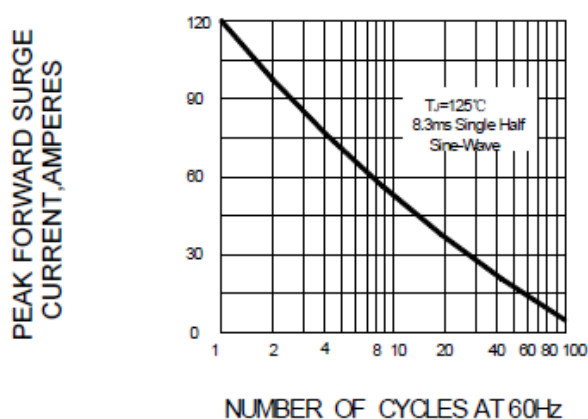
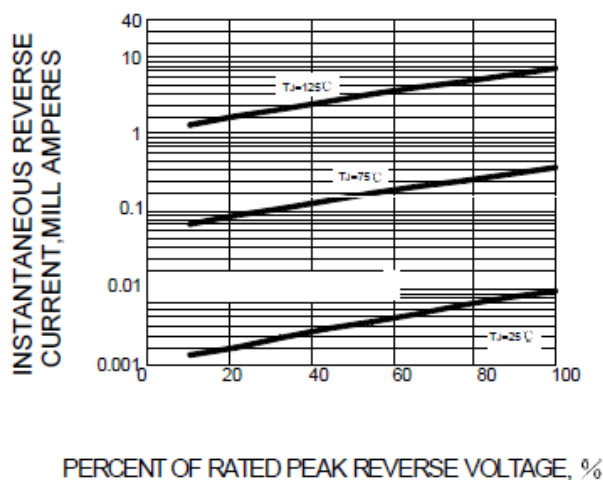


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



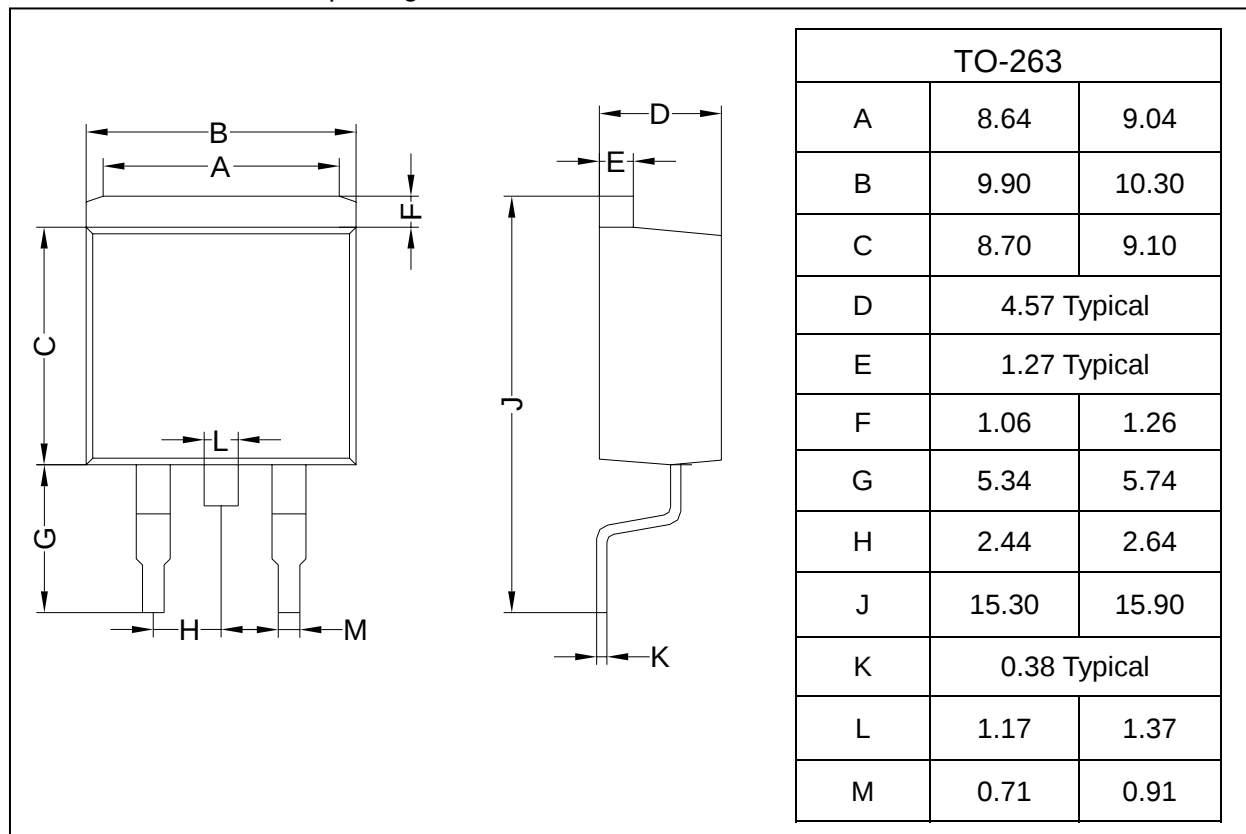
PERCENT OF RATED PEAK REVERSE VOLTAGE, %

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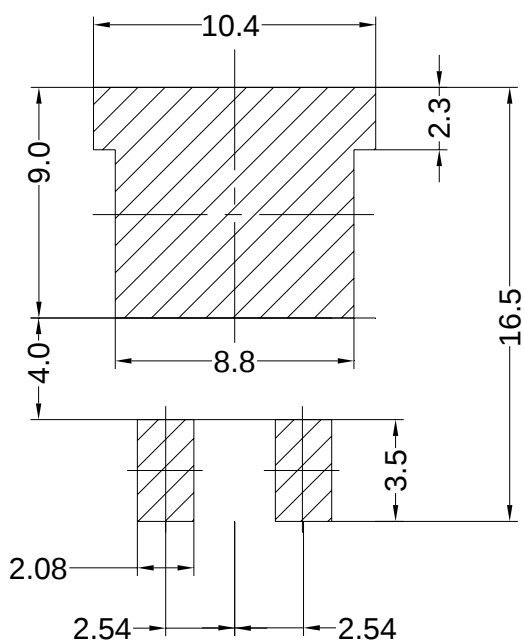
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit:mm