

Schottky Barrier Rectifier

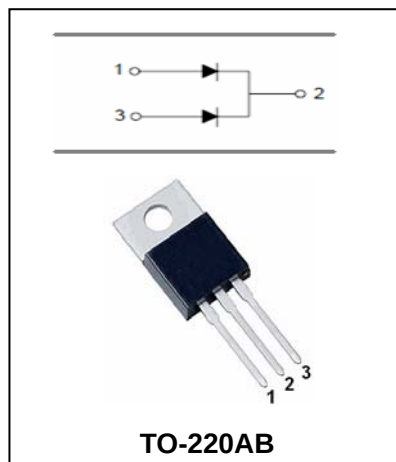
MBR15150CT...MBR15200CT

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	MBR15150CT	MBR15200CT	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	150	200	V
V_{RMS}	RMS Voltage	105	140	V
V_{DC}	DC Blocking Voltage	150	200	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^{\circ}C$	15		A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	150		A
$R_{\theta JC}$	Thermal Resistance Resistance(Note1)	1.5		$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150		$^{\circ}C$

Note1. Thermal resistance from junction to case

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

Parameter	Symbol	Test conditions	MBR15150CT	MBR15200CT	UNIT
			MAX		
Reverse Current	I _R	V _R =V _{RRM} , T _A =25℃ V _R =V _{RRM} , T _A =125℃	0.1 50		mA
Forward Voltage	V _F	I _F =7.5A	0.90	0.95	V

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

FIG.1 TYPICAL FORWARD CHARACTERISTICS

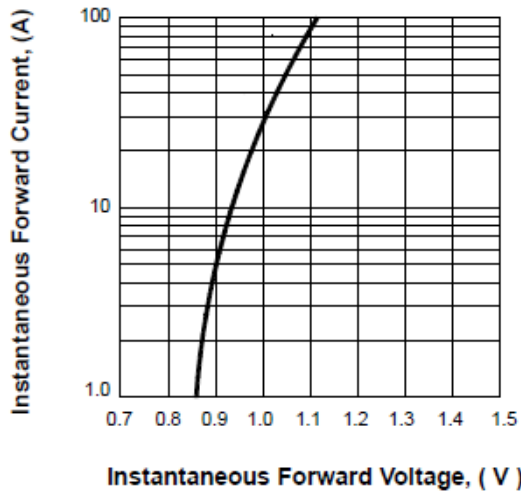


FIG.2 FORWARD DERATING CURVE

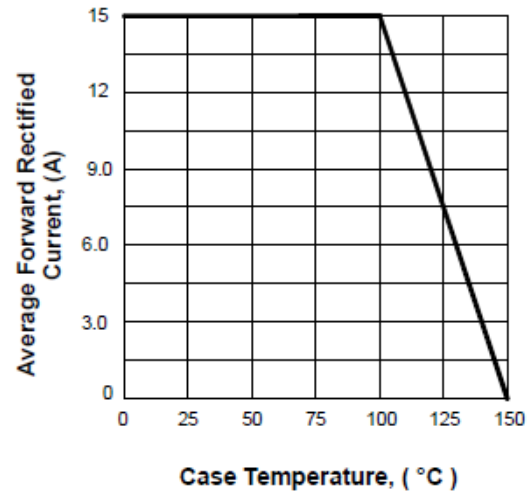


FIG.3 TYPICAL REVERSE CHARACTERISTICS

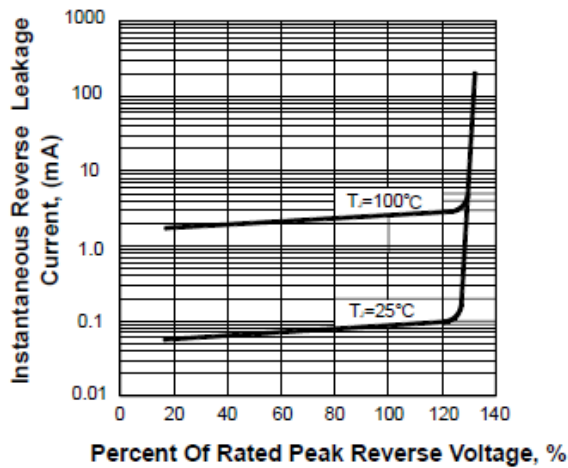
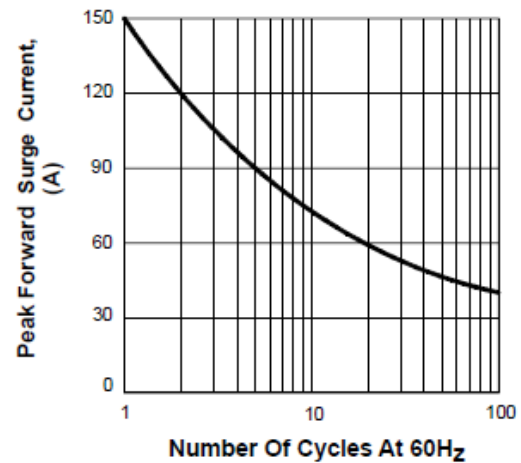


FIG.4 PEAK FORWARD SURGE CURRENT



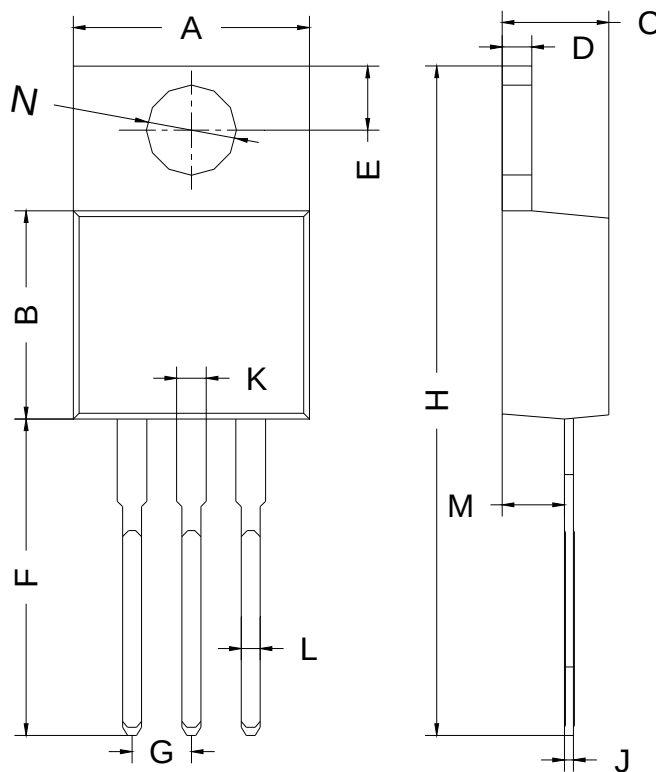
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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB



TO-220AB		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.57 Typical	
D	1.27 Typical	
E	2.64	2.84
F	13.14	13.74
G	2.44	2.64
H	28.03	28.83
J	0.38 Typical	
K	1.22	1.32
L	0.71	0.91
M	2.50 Typical	
N	3.86 Typical	
All Dimensions in mm		