



Schottky Barrier Rectifier

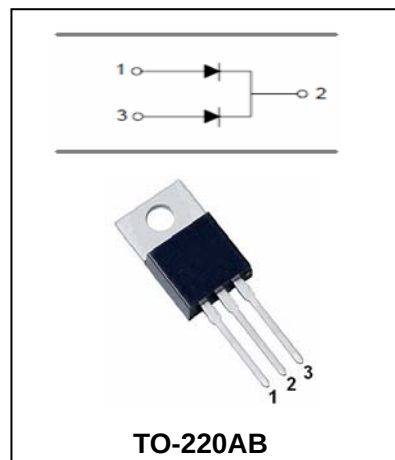
MBR20150CT, MBR20200CT

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.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR20150CT	MBR20200CT	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
$I_{(AV)}$	Average Forward Total Device Rectified Current @ $T_A = 100^\circ\text{C}$	20		A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	150		A
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case (Note 1)	1.5		$^\circ\text{C}/\text{W}$
T_j, T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150		$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	MBR20150CT	MBR20200CT	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 =10A	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

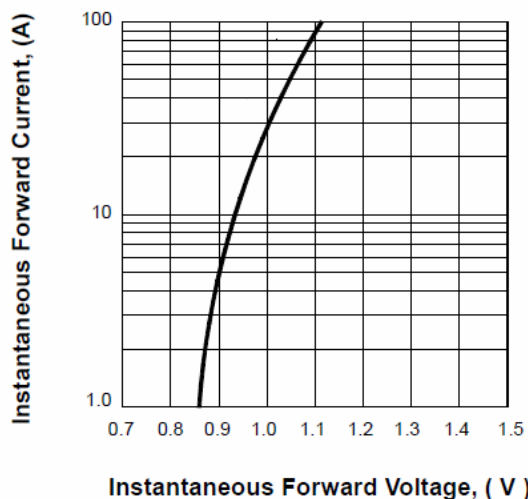


FIG.2 FORWARD DERATING CURVE

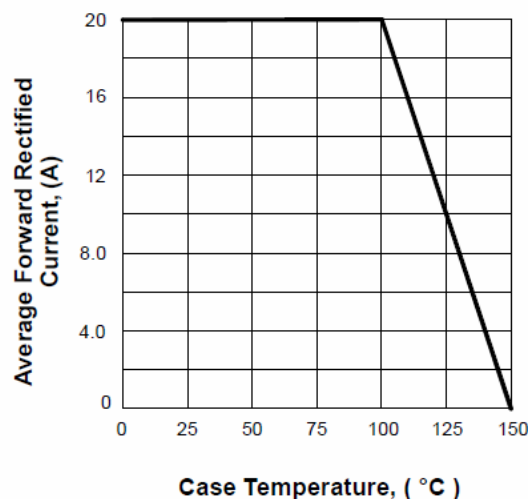


FIG.3 TYPICAL REVERSE CHARACTERISTICS

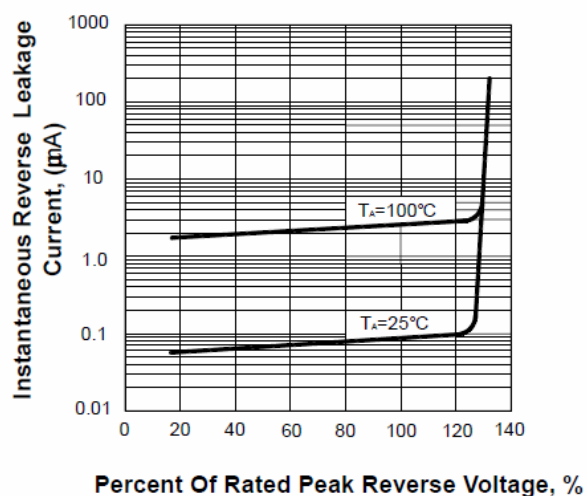
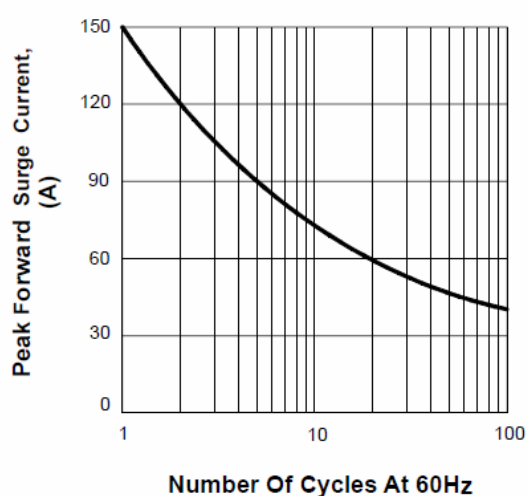


FIG.4 PEAK FORWARD SURGE CURRENT





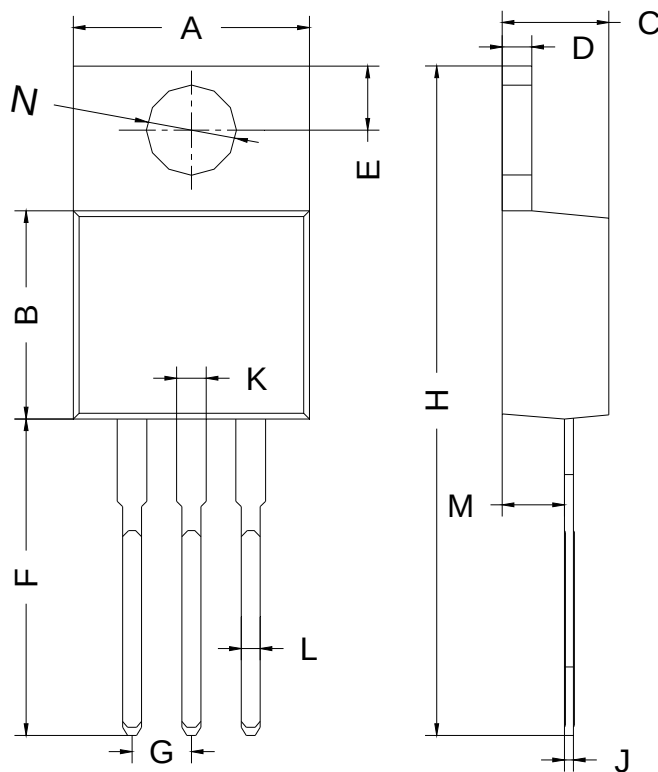
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PACKAGE OUTLINE

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		