

Schottky Barrier Rectifier

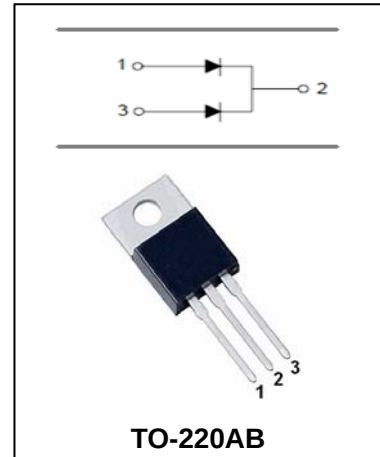
MBR30150CT...MBR30200CT

FEATURES

- High Surge Capacity.
- For Use In Low Voltage,High Frequency Inverters, Free Wheeling and Polarity Protection Applications.
- Metal Silicon Junction,Majority Carrier Conduction.
- High Current Capacity,Low Forward Voltage Drop.
- Guard Ring for Over Voltage Protection.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR30150CT	MBR30200CT	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 @ $T_A=100^{\circ}C$	30		A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated load	200		A
$R_{\theta JC}$	Thermal Resistance (Note1)	4.4		$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150		$^{\circ}C$

Note:1.Thermal resistance from junction to case.



Schottky Barrier Rectifier

MBR30150CT...MBR30200CT

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

Parameter	Symbol	Test conditions	MBR30150CT	MBR30200CT	UNIT
			MAX		
Reverse Current	I _R	V _{RM} =V _{RRM} , T _A =25℃ V _{RM} =V _{RRM} , T _A =125℃	0.1 50		mA
Forward Voltage	V _F (Note1)	I _F =15A ,T _A =25℃	0.90	0.95	V

Note:1. Pulse tesse:300 μs pulse width,1% duty cycle.

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

FIG.1 – PEAK FORWARD SURGE CURRENT

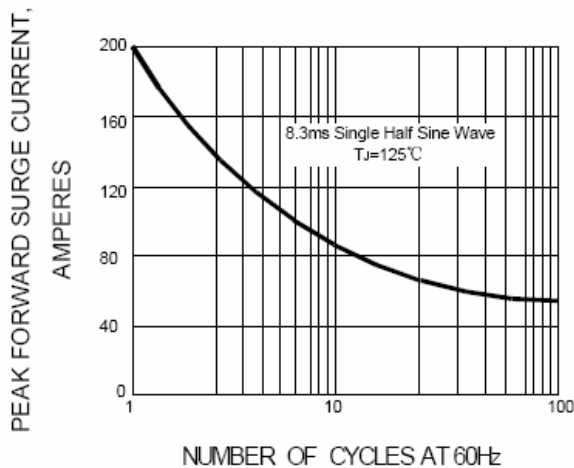


FIG.2 – FORWARD DERATING CURVE

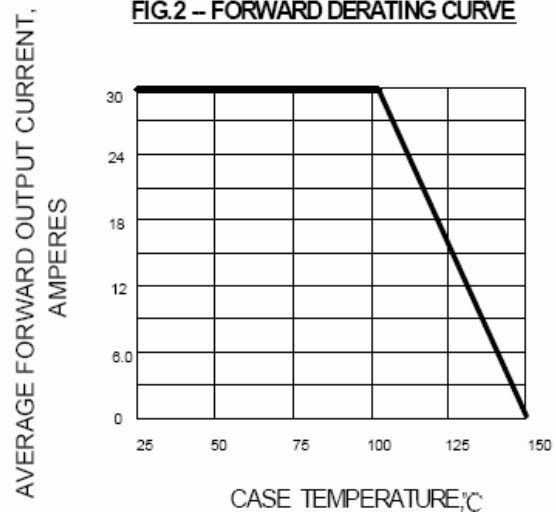


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

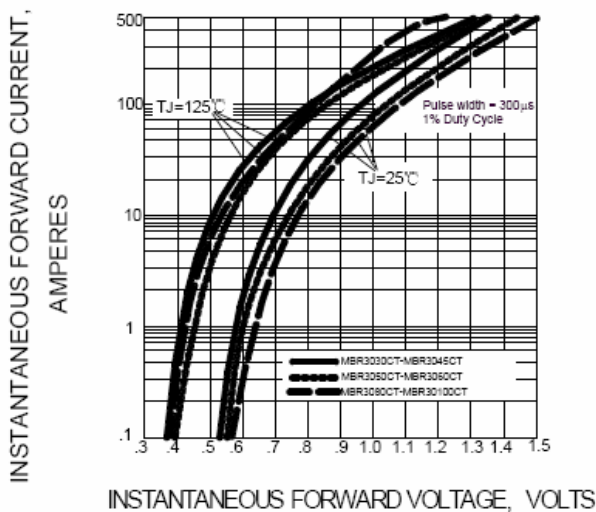
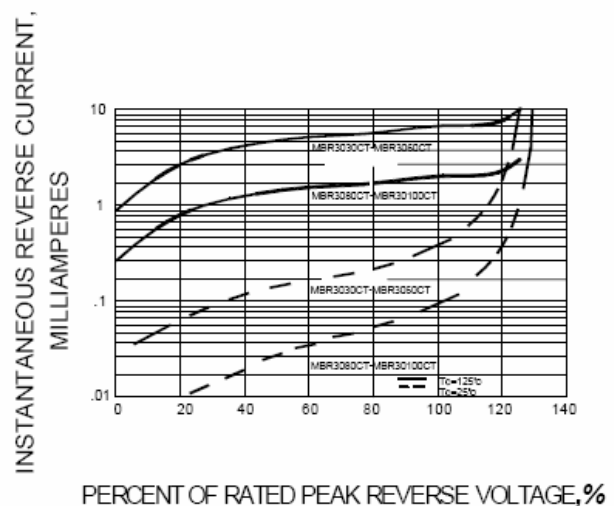


FIG.4 – TYPICAL REVERSE CHARACTERISTIC





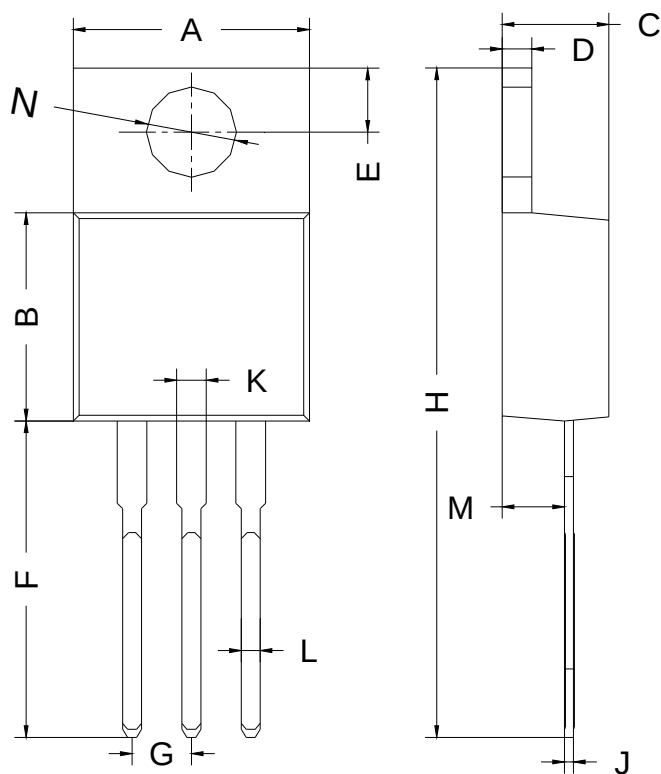
Schottky Barrier Rectifier

MBR30150CT...MBR30200CT

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		