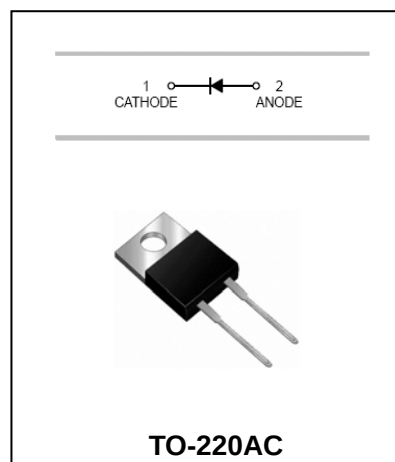


Schottky Fast Rectifiers

MBR5150---MBR5200

FEATURES

- Epitaxial Construction.
- Guard Ring Construction for Transient Protection.
- Low Surge Capability.
- High Current Capability and Low Forward Voltage Drop.
- Surge Overload Rating to 150A Peak.
- For Use in Low Voltage,High Frequency Inverters,Free Wheeling and Polarity Protection Applications.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR5150	MBR5200	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	5		A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-sine-wave superipsed on Rsted Load	125		A
$R_{\theta JA}$	Typical Thermal Resistance Junction to Case	25		°C/W
T_j T_{stg}	Operating Junction and torageTemperature Range	-65 to +175		°C

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

Parameter	Symbol	Test conditions	MBR5150	MBR5200	UNIT
			MAX		
Reverse Current	I _R	V _R =V _{RRM} , T _A =25°C	0.1		mA
		V _R =V _{RRM} , T _A =125°C	50		
Forward Voltage	V _F	I _F =5A	0.90	0.95	V

Schottky Fast Rectifiers

MBR5150---MBR5200

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

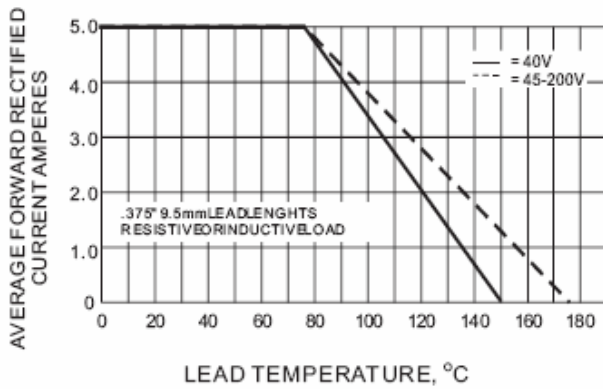


Fig.1 FOREARD CURRENT DERATING CURVE

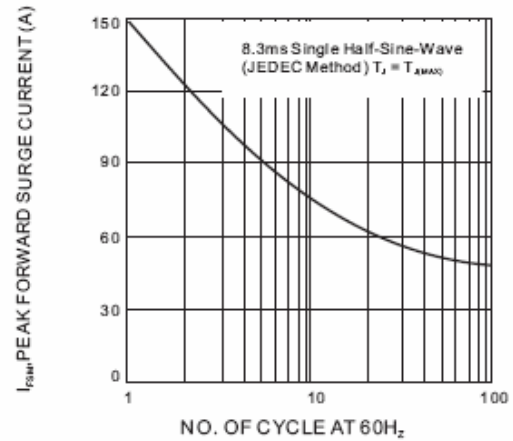


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

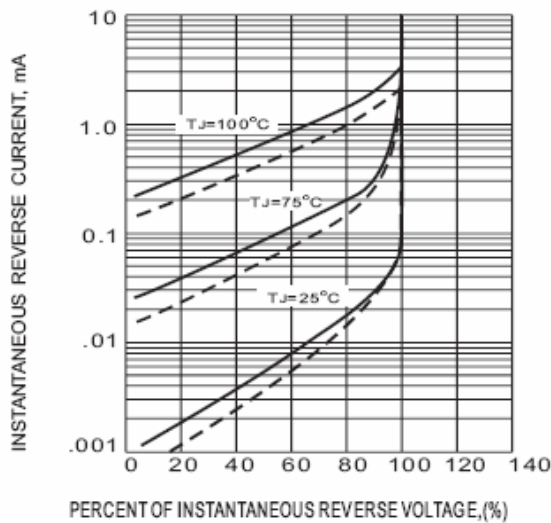


Fig.3 TYPICAL RECERSE CHARACTERISTIC

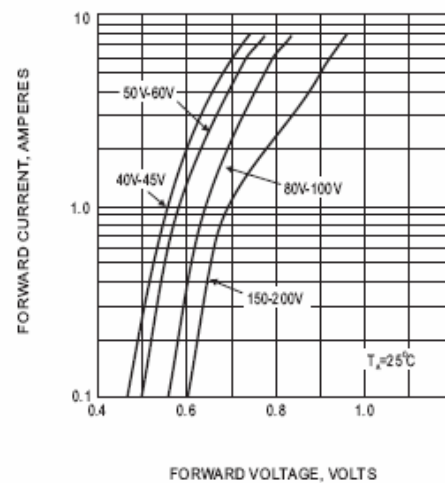


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

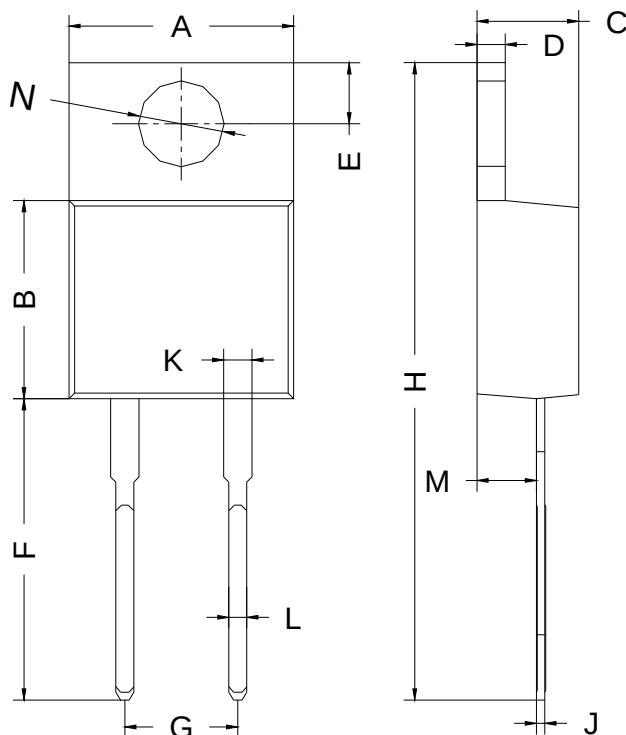
Schottky Fast Rectifiers

MBR5150---MBR5200

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AC



TO-220AC		
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	4.98	5.18
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		