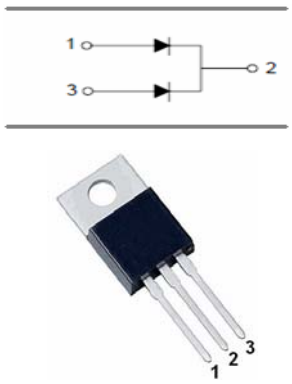
Schottky Fast Rectifiers MBR5150CT---MBR5200CT

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.

Lead-free



TO-220AB

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR5150 CT	MBR5200 CT	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		℃/W
T_j T_{stg}	Operating Junction and torageTemperature Range	-55 to +150		℃

ELECTRICAL CHARACTERISTICS@ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MBR5150	MBR5200	UNIT
			MAX		
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25℃$	0.1		mA
		$V_R=V_{RRM}, T_A=125℃$	50		
Forward Voltage	V_F	I_F=5A	0.90	0.95	V

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TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

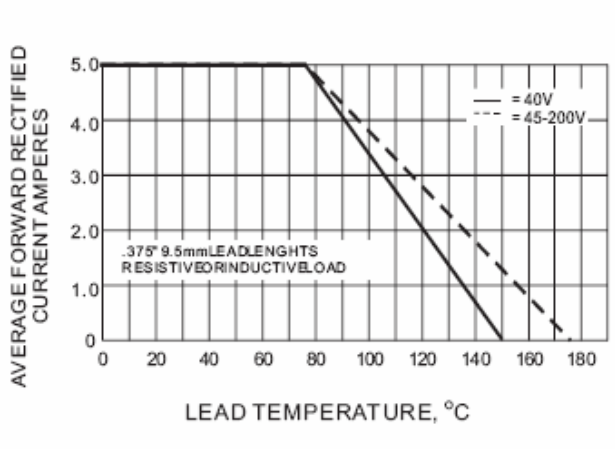

Fig.1 FOREARD CURRENT DERATING CURVE

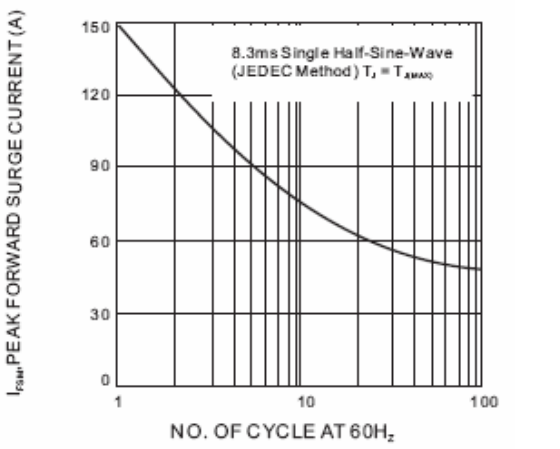

Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

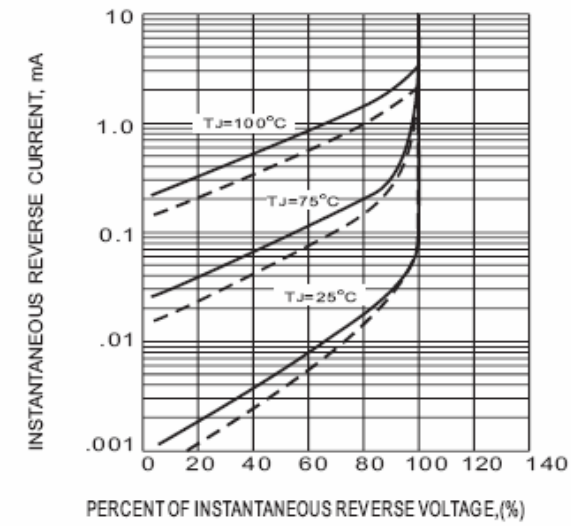

Fig.3 TYPICAL RECERSE CHARACTERUSTIC

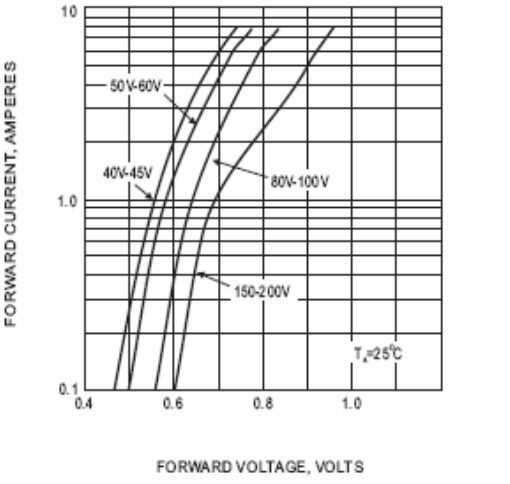

Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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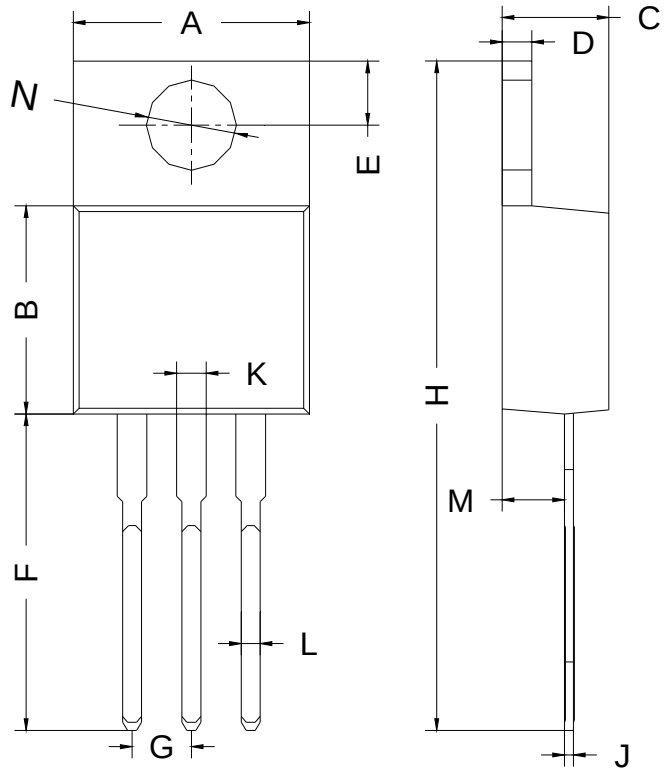
PACKAGE OUTLINE

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		