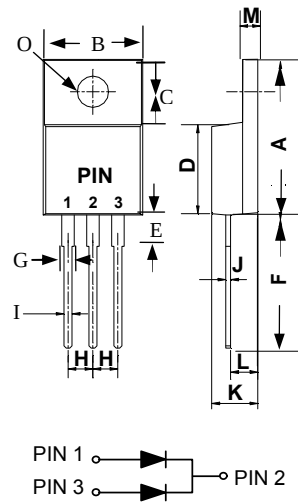


**MBR10150****Schottky Barrier Rectifiers****FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

TO- 220AB

TO-220AB		
DIM.	MIN.	MAX.
A	15.00	16.00
B	9.90	10.40
C	6.35	6.65
D	8.55	9.35
E	3.00	—
F	12.80	—
G	1.10	1.40
H	2.45	2.65
I	0.45	0.95
J	0.35	0.45
K	4.35	4.75
L	2.55	3.15
M	1.25	1.45
O	Ø3.65	Ø3.95
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

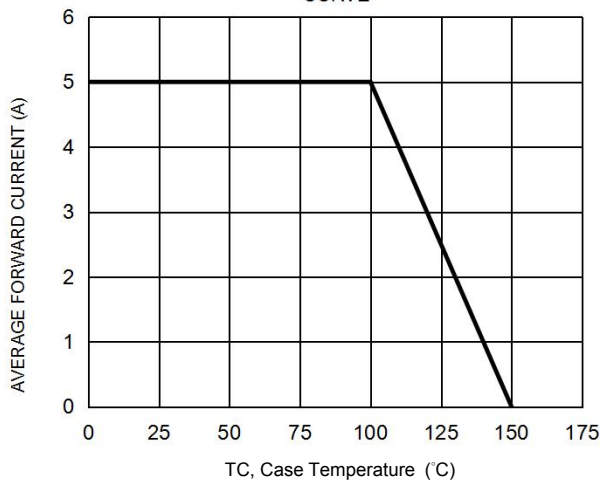
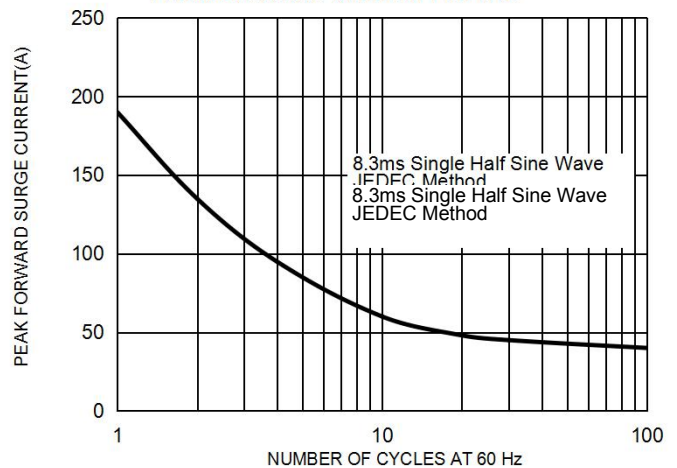
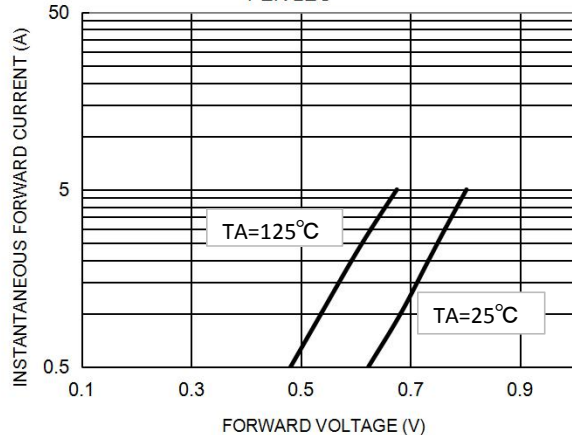
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	150	V
Working Peak Reverse Voltage		V_{RWM}	150	V
Maximum DC Blocking Voltage		V_{DC}	150	V
Maximum Average Forward Rectified Current	Per Leg	I_O	5	A
	Total		10	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave		I_{FSM}	190	A
Operating Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)		$R_{\theta JC}$	2	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

**MBR10150****Schottky Barrier Rectifiers****ELECTRICAL CHARACTERISTICS**($T_A=25^\circ\text{C}$ unless otherwise noted)

Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)		V_F	Typ.	Max.	V
at $I_F=2\text{A}$	$T_A=25^\circ\text{C}$		0.73	-	
	$T_A=125^\circ\text{C}$		0.59	-	
at $I_F=3\text{A}$	$T_A=25^\circ\text{C}$		0.76	-	
	$T_A=125^\circ\text{C}$		0.63	-	
at $I_F=5\text{A}$	$T_A=25^\circ\text{C}$		0.80	0.87	
	$T_A=125^\circ\text{C}$		0.68	-	
Maximum Reverse Current at $V_R=150\text{V}$		I_R	1	5	μA
			0.6	-	mA

Note2:Pulse test: 300 μs pulse width, 1 % duty cycle**RATING AND CHARACTERISTIC CURVES****FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE****FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG****FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG****FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG**