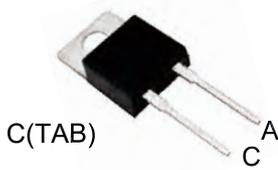


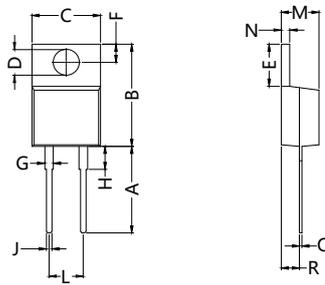
MBR5150 thru MBR5200

High T_{jm} Low IRRM Schottky Barrier Diodes



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-220AC



Dim.	Millimeter	
	Min.	Max.
A	12.70	13.97
B	14.73	16.00
C	9.91	10.66
ØD	3.54	4.08
E	5.85	6.85
F	2.54	3.18
G	1.15	1.65
H	2.79	5.84
J	0.64	1.01
L	5.05BSC	
M	4.32	4.82
N	1.14	1.39
Q	0.35	0.56
R	2.29	2.79



	V _{RRM} V	V _{RMS} V	V _{DC} V
MBR5150	150	105	150
MBR5200	200	140	200

Symbol	Characteristics	Maximum Ratings	Unit
I _(AV)	Maximum Average Forward Rectified Current @T _c =120°C	5	A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	120	A
dv/dt	Voltage Rate Of Change (Rated V _R)	10000	V/us
V _F	Maximum Forward Voltage (Note 1) I _F =5A @T _J =25°C I _F =5A @T _J =125°C I _F =10A @T _J =25 °C I _F =10A @T _J =125°C	0.95 - 0.95 0.80	V
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage @T _J =25°C @T _J =125°C	0.05 15	mA
R _{θJC}	Typical Thermal Resistance (Note 2)	4.5	°C/W
T _J	Operating Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

NOTES: 1. 300us Pulse Width, Duty Cycle 2%.
2. Thermal Resistance Junction To Case.
3. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.

FEATURES

- *Metal of silicon rectifier, majority carrier conducton
- *Guard ring for transient protection
- *Low power loss, high efficiency
- *High current capability, low V_F
- *High surge capacity
- *For use in low voltage, high frequency inverters, free whelling, and polarity protection applications
- * RoHS compliance

MECHANICAL DATA

- *Case: TO-220AC molded plastic
- *Polarity: As marked on the body
- *Weight: 2 grams
- *Mounting position: Any



MBR5150 thru MBR5200

High T_{jm} Low IRRM Schottky Barrier Diodes

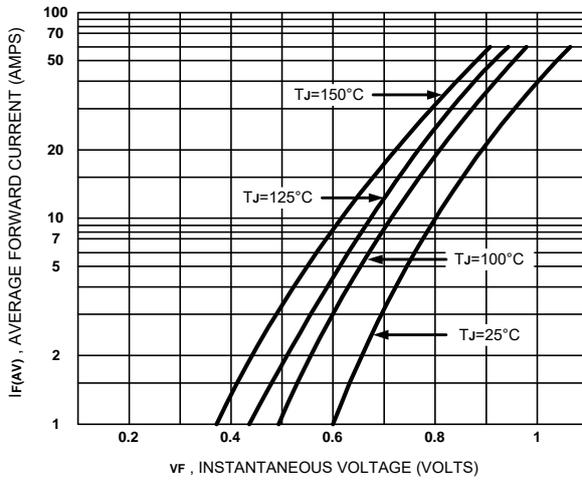


Figure 1. Typical Forward Voltage (Per Leg)

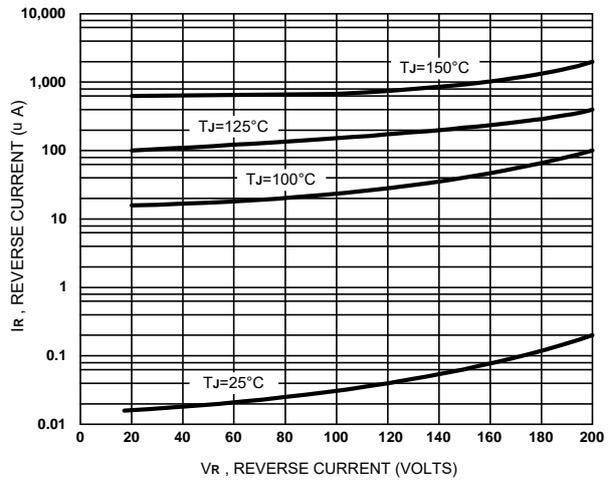


Figure 2. Typical Reverse Current (Per Leg)

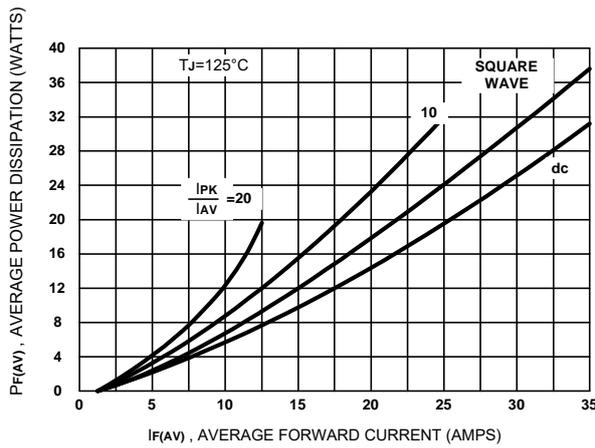


Figure 3. Forward Power Dissipation

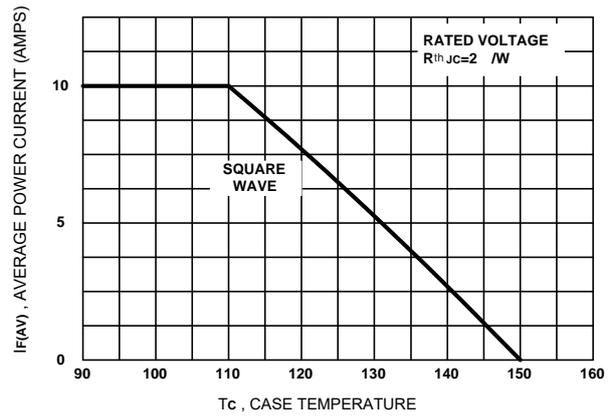


Figure 4. Forward Current Derating, Case

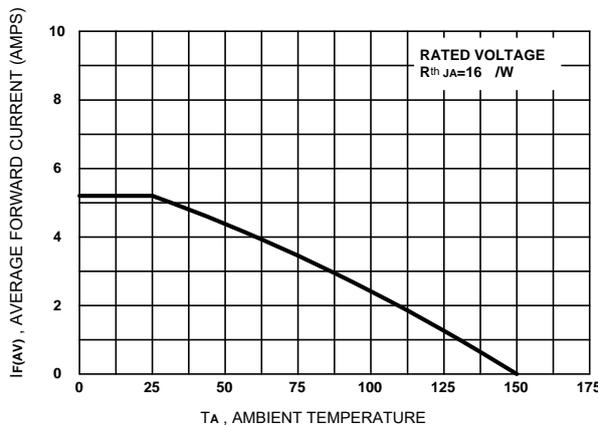


Figure 5. Current Derating, Ambient

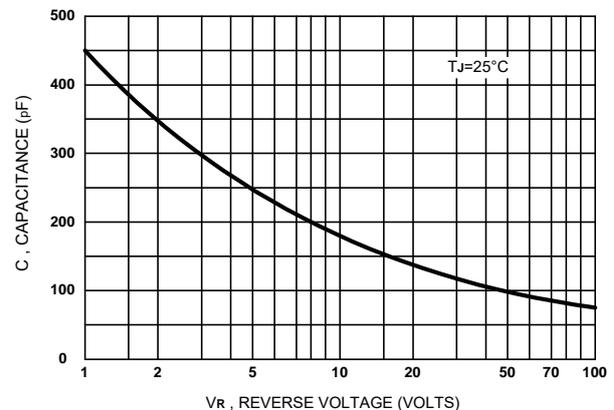


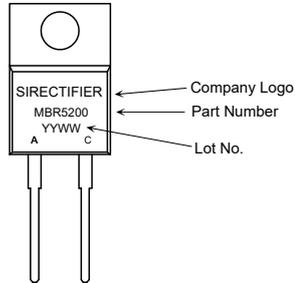
Figure 6. Typical Capacitance (Per Leg)



MBR5150 thru MBR5200

High T_{jm} Low IRRM Schottky Barrier Diodes

Marking



Ordering Information

Part Number	Package	Shipping	Marking Code
MBR5150	TO-220AC	50pcs / Tube	MBR5150
MBR5200	TO-220AC	50pcs / Tube	MBR5200