

MBR20100 thru MBR20200

20 Amp HT Power Schottky Barrier Rectifier

100 Volts to 200 Volts

Features

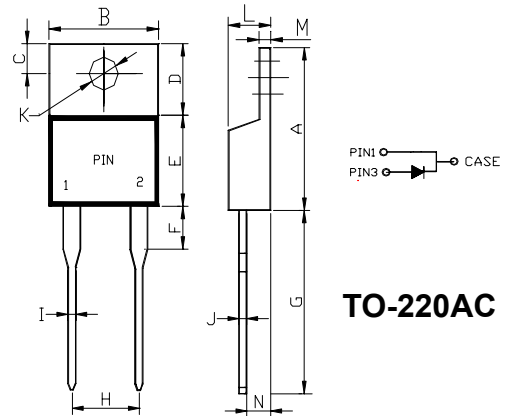
- * High Junction Temperature Capability
- * Low Leakage Current and Low Forward Voltage Drop
- * Low Power Loss and High Efficiency

Maximum Ratings

- * Operating Junction Temperature: 150°C
- * Storage Temperature: - 55 °C to +175°C
- * Per diode Thermal Resistance 2.2°C/W Junction to Case

Mechanical Data

- * Case: Molded Plastic
- * Terminals: Plated Lead Solderable per MIL-STD-202, Method 208
- * Marking: Type Number
- * Weight: 2.24 grams (approx)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.100	0.135	2.54	3.43	
D	0.230	0.270	5.84	6.86	
E	0.380	0.420	9.65	10.67	
F	-----	0.250	-----	6.35	
G	0.500	0.580	12.70	14.73	
H	0.190	0.210	4.83	5.33	
I	0.020	0.045	0.51	1.14	
J	0.012	0.025	0.30	0.64	
K	0.139	0.161	3.53	4.09	ϕ
L	0.140	0.190	3.56	4.83	
M	0.045	0.055	1.14	1.40	
N	0.080	0.115	2.03	2.92	

Symbol	Characteristics	MBR20100	MBR20150	MBR20200	Unit
VRRM	Maximum Recurrent Peak Reverse Voltage	100	150	200	V
VRM	Maximum DC Blocking Voltage	100	150	200	V
VR(RMS)	Maximum RMS Voltage	70	105	140	V
V _F	Maximum Forward Voltage Drop Per Element I _F =20A @T _J =25°C	0.90		0.95	V
I _{F(AV)}	Average Forward Current	20			A
I _{FSM}	8.3ms Single Half-Sine-Wave Superimposed On Rated Load	150			A
dv/dt	Voltage Rate Of Change (Rated V _R)	10000			V/us
I _R	Maximum DC Reverse Current At Rated DC Blocking Voltage	T _J =25°C 0.2 T _J =125°C 40			mA
R _{thJC}	Typical Thermal Resistance (Note 2)	2.0			°C/ W
C _J	Typical Junction Capacitance (Note 3)	400			pF
T _J	Operating Temperature Range	-55to+150			°C
T _{STG}	Storage Temperature Range	-55to+175			°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.