

## MBR10100CT thru MBR10200CT

### 10 Amp HT Power Schottky Barrier Rectifier

#### 100 Volts to 200Volts

#### Features

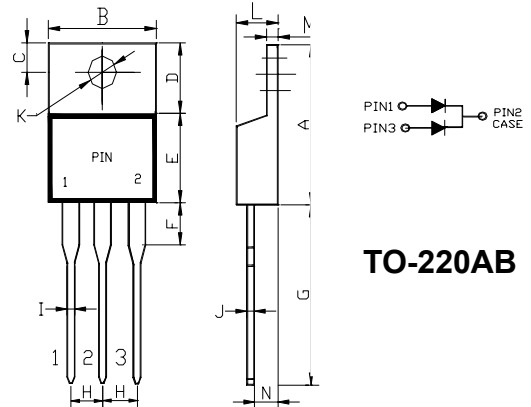
- \* High Junction Temperature Capability
- \* Low Leakage Current and Low Forward Voltage Drop
- \* Low Power Loss and High Efficiency

#### 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)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.570	0.620	14.4	15.75	
B	0.380	0.405	9.66	10.28	
C	0.100	0.120	2.54	3.04	
D	0.235	0.255	5.97	6.48	
E	0.335	0.365	8.51	9.27	
F	0.110	0.155	2.80	3.93	
G	0.500	0.562	12.7	14.27	
H	0.095	0.105	2.42	2.66	
I	0.025	0.035	0.64	0.89	
J	0.016	0.025	0.41	0.64	
K	0.142	0.147	3.61	3.73	∅
L	0.160	0.190	4.06	4.82	
M	0.045	0.055	1.14	1.39	
N	0.102 typ		2.6 typ		

Symbol	Characteristics	MBR10100CT	MBR10150CT	MBR10200CT	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 <sub>F</sub>	Maximum Forward Voltage (Note 1) I <sub>F</sub> =10A @T <sub>J</sub> =25°C	0.85		0.95	V
I <sub>F(AV)</sub>	Average Forward Current	10			A
I <sub>FSM</sub>	8.3ms Single Half-Sine-Wave Peak Forward Surge Current	150			A
dv/dt	Voltage Rate Of Change (Rated V <sub>R</sub> )	10000			V/us
I <sub>R</sub>	Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>J</sub> =25°C 40			mA
R <sub>thJC</sub>	Typical Thermal Resistance (Note 2)	2.0			°C/ W
C <sub>J</sub>	Typical Junction Capacitance (Note 3)	170			pF
T <sub>J</sub>	Operating Temperature Range	-55to+150			°C
T <sub>STG</sub>	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.