

MBR10100CT thru MBR10200CT

10 Amp HT Power Schottky Barrier Rectifier

100 Volts to 200Volts

Features

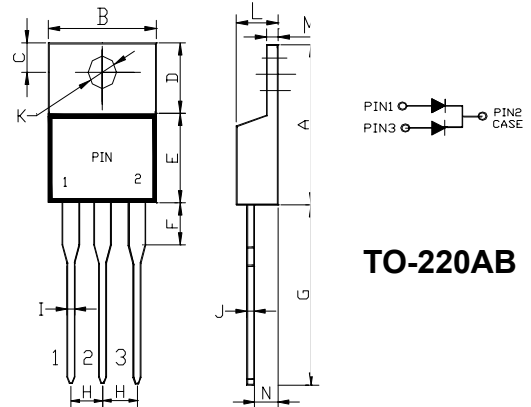
- * High Junction Temperature Capability
- * Low Leakage Current and Low Forward Voltage Drop
- * Low Power Loss and High Efficiency

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)


TO-220AB

DIMENSIONS					
DIM	INCHES		MM		NOTE
	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	3.37	ϕ
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 _F	Maximum Forward Voltage (Note 1) I _F =10A @T _J =25°C		0.85		0.95	V
I _{F(AV)}	Average Forward Current		10			A
I _{FSM}	8.3ms Single Half-Sine-Wave Peak Forward Surge Current		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 T _J =125°C	0.2 40			mA
R _{thJC}	Typical Thermal Resistance (Note 2)		2.0			°C/ W
C _J	Typical Junction Capacitance (Note 3)		170			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.