

MBR30100CT thru MBR30200CT

30 Amp HT Power Schottky Barrier Rectifier

100 Volts to 200 Volts

Features

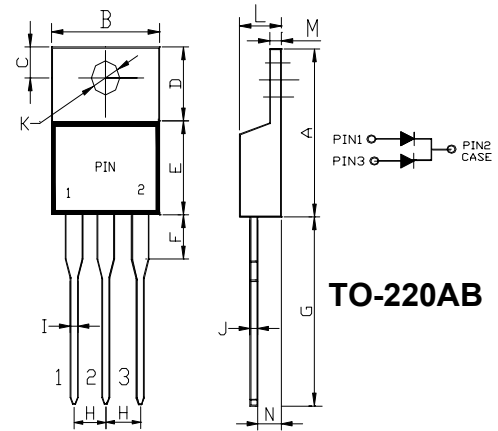
- * High Junction Temperature Capability
- * Low Leakage Current and Low Forward Voltage Drop
- * Low Power Loss and High Efficiency

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)



TO-220AB

DIM	DIMENSIONS				NO TE
	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	3.77	db
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	MBR30100CT	MBR30150CT	MBR30200CT	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
VF	Maximum Forward Voltage (Note 1) If = 15.0A @TJ=25°C	0.90		0.95	V
IF(AV)	Average Forward Current per leg	15			A
IFSM	8.3ms Single Half-Sine-Wave Peak Forward Surge Current	150			A
dv/dt	Voltage Rate Of Change (Rated VR)	10000			V/us
IR	Maximum DC Reverse Current At Rated DC Blocking Voltage	@TJ=25°C 40	0.2		mA
RthJC	Typical Thermal Resistance (Note 2)	2.0			°C/ W
CJ	Typical Junction Capacitance (Note 3)	200			pF
TJ	Operating Temperature Range	-55to+ 150			°C
TSTG	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.