

VOLTAGE RANGE: 100 - 200V

CURRENT: 20.0 A

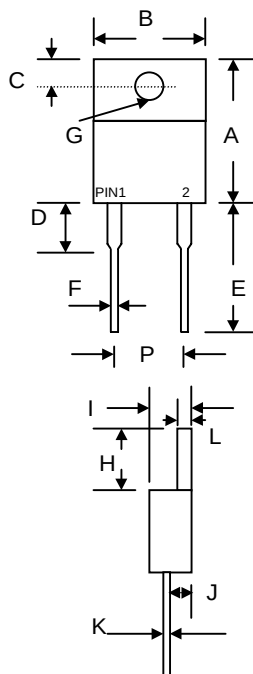


Features

- Metal of silicon rectifier, majority carrier conduction
- Guardring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0

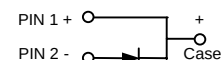
Mechanical Data

- Case: TO-220AC molded plastic
- Polarity: As marked on the body
- Weight: 0.08 ounces, 2.24 grams
- Mounting position: Any



TO-220		
Dim	Min	Max
A	14.9	15.1
B	—	10.5
C	2.62	2.87
D	3.56	4.06
E	13.46	14.22
F	0.68	0.94
G	3.74 Ø	3.91 Ø
H	5.84	6.86
I	4.44	4.70
J	2.54	2.79
K	0.35	0.64
L	1.14	1.40
P	4.95	5.20

All Dimensions in mm



Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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