



E502650

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Conductivity Metal Case

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 1.4°C/W Junction to Case

Mechanical Data

- Mounting Torque: 20 in-lbs Maximum
- Mounting Hole For #10 Screw

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB2505	MB2505	50V	35V	50V
MB251	MB251	100V	70V	100V
MB252	MB252	200V	140V	200V
MB254	MB254	400V	280V	400V
MB256	MB256	600V	420V	600V
MB258	MB258	800V	560V	800V
MB2510	MB2510	1000V	700V	1000V

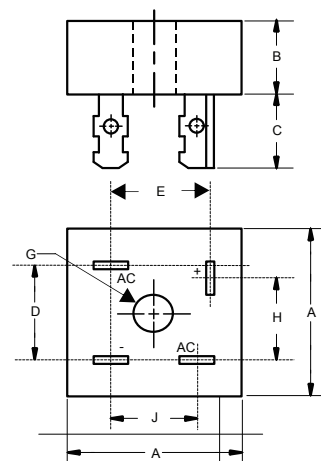
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25A	$T_C = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	300A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_{FM} = 12.5\text{A Per Element}; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 μA	$T_J = 25^\circ\text{C}$
Current Squared Time	I^2t	373.5A ² S	(1ms < t < 8.3ms)

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

25 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

MB-35



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.110	1.135	28.20	28.83	
B	0.425	0.447	10.80	11.35	
C	0.421	0.480	10.70	12.20	
D	0.673	0.751	17.10	19.10	
E	0.602	0.681	15.30	17.30	
G	0.193	---	4.90	---	Φ
H	0.602	0.681	15.30	17.30	
J	0.519	0.598	13.20	15.20	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

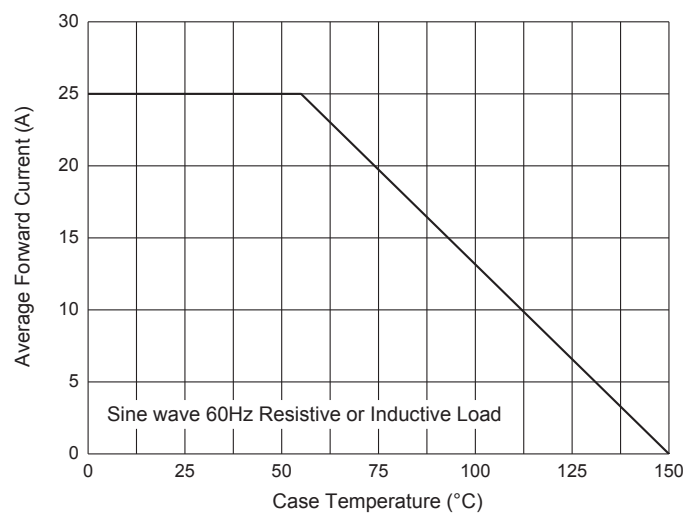


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

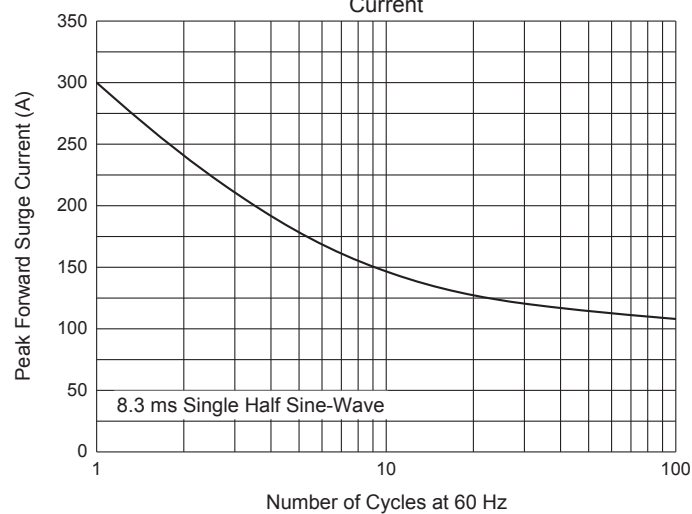


Fig. 3 - Typical Instantaneous Forward Characteristics

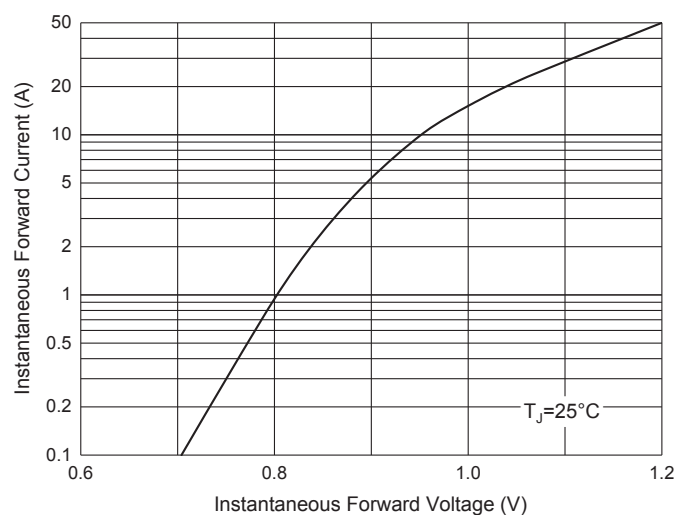
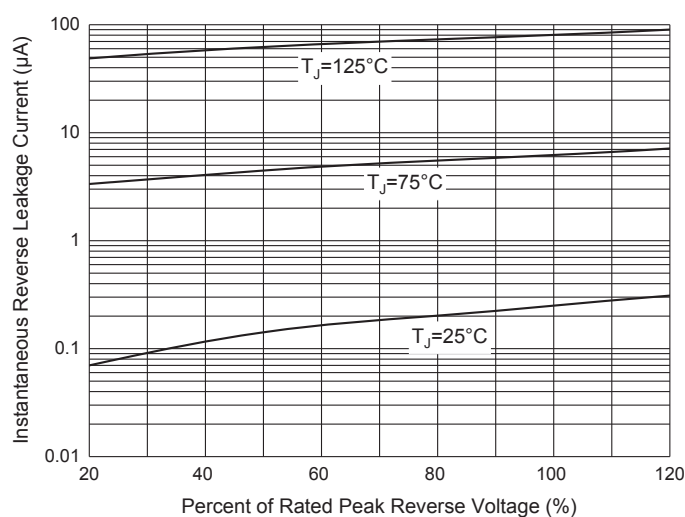


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Box,400pcs/Carton

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