

MB12M THRU MB110M

Features

- Saves Space On Printed Circuit Board
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Mechanical Data

- Terminals: Plated leads Solderable per MIL-STD-750, Method 2026
- Moisture Sensitivity: Level 1 per J-STD-020C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB12M	MB12M	20V	14V	20V
MB14M	MB14M	40V	28V	40V
MB16M	MB16M	60V	42V	60V
MB18M	MB18M	80V	56V	80V
MB110M	MB110M	100V	70V	100V

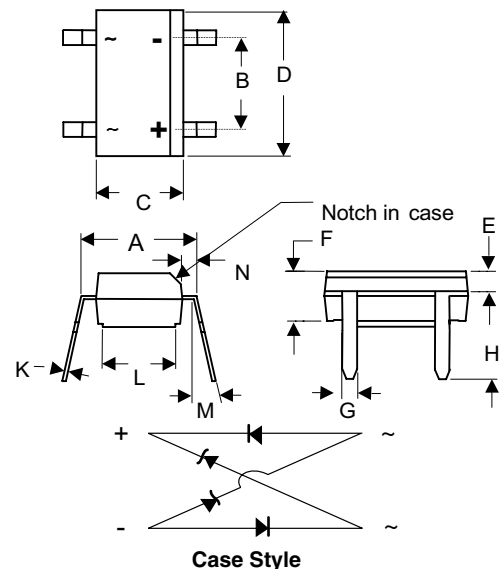
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1A	
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MB12M~MB14M MB16M MB18M~MB110M	V_F	0.50V 0.70V 0.85V	$I_{FM} = 1A$; $T_A = 25^{\circ}C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	$T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$
Typical Thermal Resistance	R_{thJA} R_{thJL}	$88^{\circ}C/W^{(2)}$ $28^{\circ}C/W^{(2)}$	per leg
Operating Junction and Storage Temperature Range	T_J T_{STG}	-55 to +150 $^{\circ}C$	

- Notes:
- High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7
 - Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2*0.2"(5.0*5.0mm) copper pad areas.

1 Amp Schottky Bridge Rectifier 20 to 100 Volts

MB-1



Case Style

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.195	.205	4.95	5.21	
B	.095	.105	2.41	2.67	
C	.144	.161	3.65	4.10	
D	.179	.190	4.55	4.83	
E	.039	.049	0.99	1.24	
F	.090	.106	2.30	2.70	
G	.017	.029	0.43	0.74	
H	.132	.148	3.35	3.75	
K	.006	.016	0.15	0.41	
L	.137	.147	3.48	3.73	
M	10°	15°	10°	15°	
N	.020	.028	0.51	0.71	

Fig.1 Forward Current Derating Curve

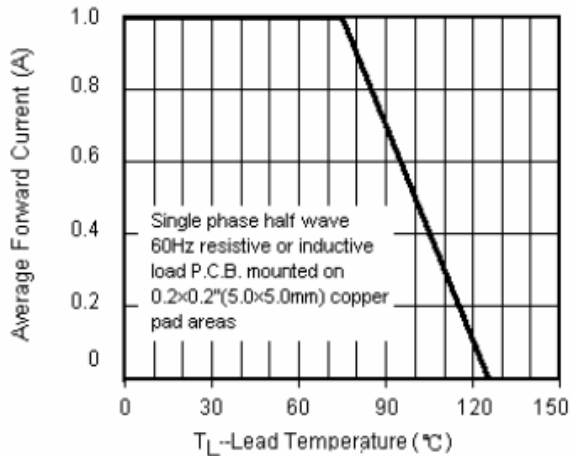


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

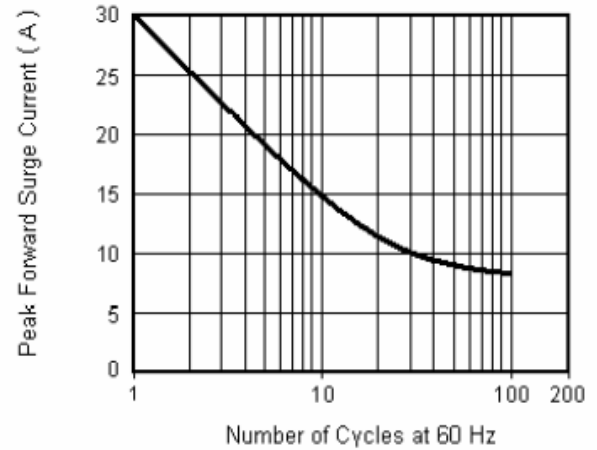


Fig.3 Typical Instantaneous Forward Characteristics

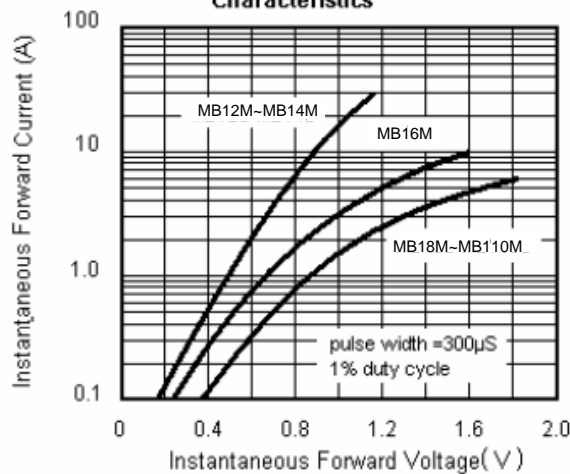
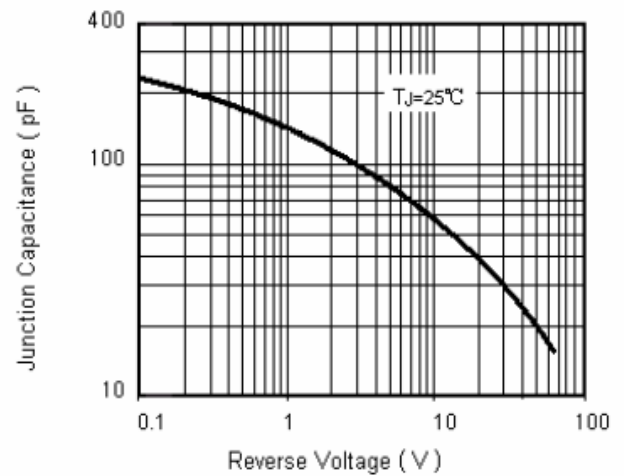


Fig.4 Typical Junction Capacitance



Ordering Information

Device	Packing
(Part Number)-BP	Bulk;5K/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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