MB12S THRU MB110S

Surface Mount Schottky Bridge Rectifier
1Amp 20 to 100 Volts

Features

- High Temperature Soldering Guaranteed:260℃/10 Second
- Saves Space On Printed Circuit Board

Mechanical Data

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material:Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Teminals: Plated leads Solderable per MIL-STD-750,Method 2026
- Moisture Sensitiviy:Level 1 per J-STD-020C

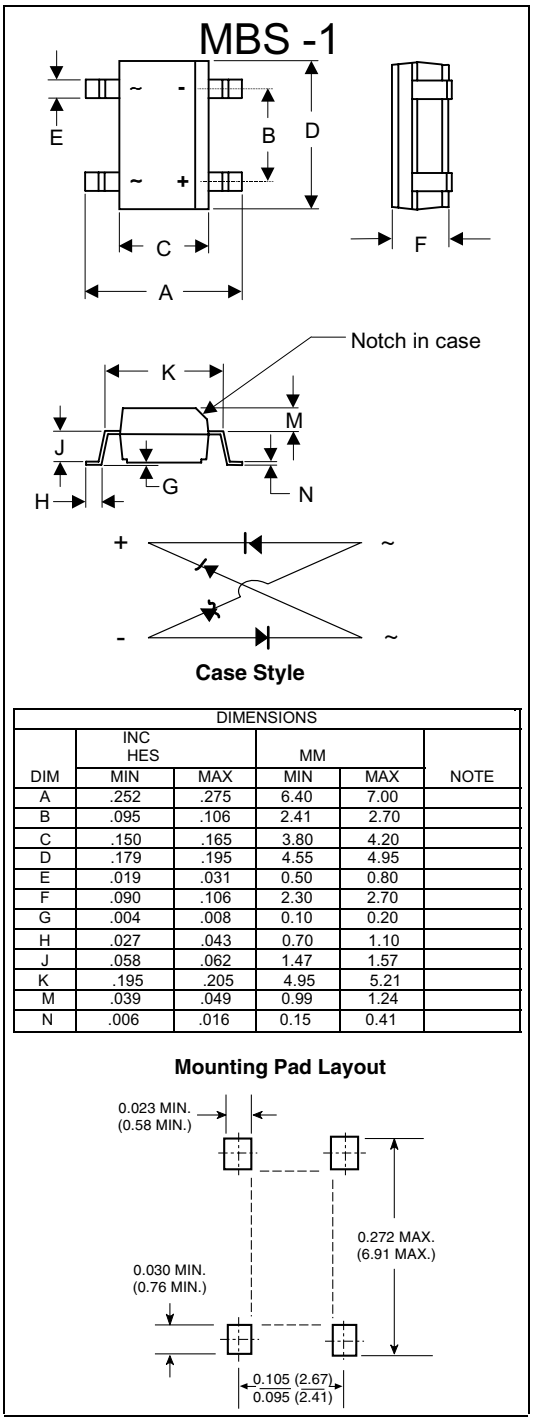
Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB12S	MB12S	20V	14V	20V
MB14S	MB14S	40V	28V	40V
MB16S	MB16S	60V	42V	60V
MB18S	MB18S	80V	56V	80V
MB110S	MB110S	100V	70V	100V

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 MB12S MB14S MB16S MB18S~MB110S	V_F	0.50V 0.70V 0.85V	I_{FM} = 1A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	T_A = 25°C T_A = 100 °C
Typical Thermal Resistance	R_{thJA} R_{thJL}	88°C/W(2) 28°C/W(2)	per leg
Operating Junction and Storage Temperature Range	T_J T_{STG}	-55 to+150 °C	

Notes: 1. High Temperature Solder Exemption Applied.

2. Thermal resistance form junction to ambient and from junction to lead P.C.B. mounted on 0.2*0.2"(5.0*5.0mm) copper pad areas.



Case Style

DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.252	.275	6.40	7.00	
B	.095	.106	2.41	2.70	
C	.150	.165	3.80	4.20	
D	.179	.195	4.55	4.95	
E	.019	.031	0.50	0.80	
F	.090	.106	2.30	2.70	
G	.004	.008	0.10	0.20	
H	.027	.043	0.70	1.10	
J	.058	.062	1.47	1.57	
K	.195	.205	4.95	5.21	
M	.039	.049	0.99	1.24	
N	.006	.016	0.15	0.41	

Mounting Pad Layout

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Fig.1 Forward Current Derating Curve

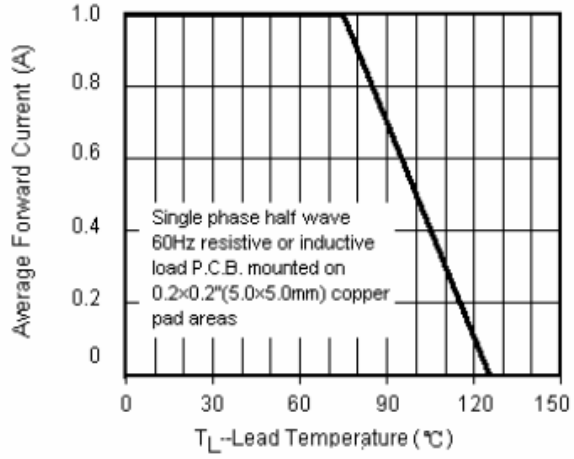

Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

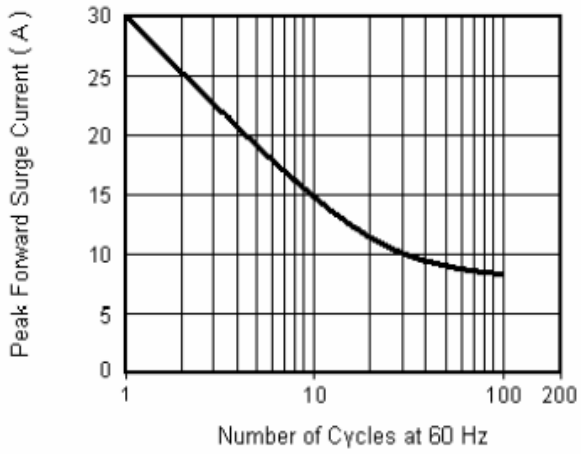

Fig.3 Typical Instantaneous Forward Characteristics

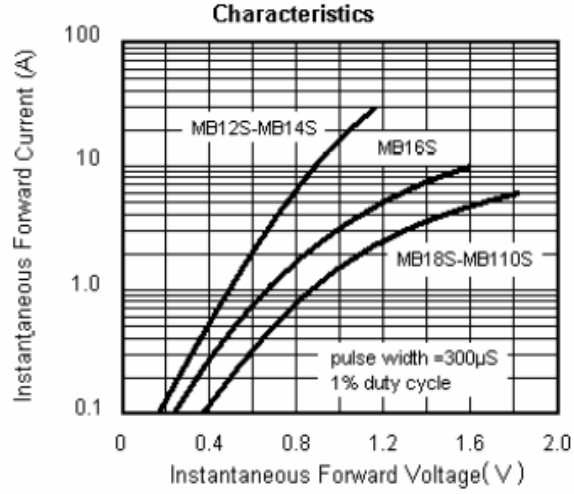

Fig.4 Typical Junction Capacitance