



MINI SURFACE MOUNT SCHOTTKY BARRIER
SINGLE-PHASE BRIDGE RECTIFIER

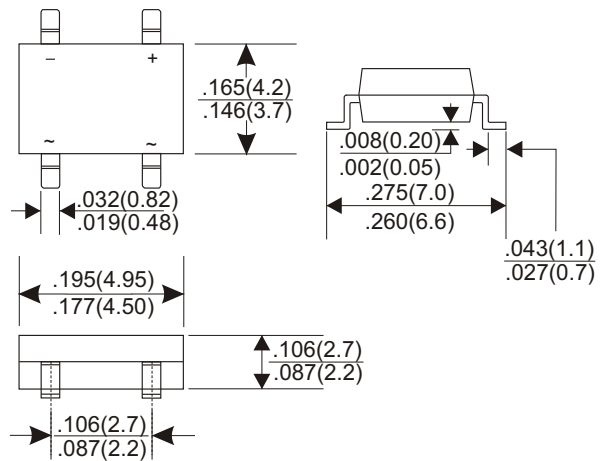


VOLTAGE- 20 to 100 Volts CURRENT- 1.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity ,low VF
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering guaranteed: 260°C /10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MDI Unit:inch(mm)



MECHANICAL DATA

- Terminals:Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Standard packaging: 12mm tape (EIA-481)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

PARAMETER	SYMBOLS	MB12S	MB14S	MB16S	MB18S	MB110S	UNITS	
Marking Code		MB12S	MB14S	MB16S	MB18S	MB110S		
Maximum Recurrent Peak Reverse Voltage	VRRM	20	40	60	80	100	V	
Maximum RMS Voltage	VRMS	14	28	42	56	70	V	
Maximum DC Blocking Voltage	VDC	20	40	60	80	100	V	
Maximum Average Forward Rectified Current at TL (See figure 1)	I(AV)	1.0					A	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30.0					A	
I ² t Rating for fusing (t<8.3ms)	I ² t	3.735					A ² Sec	
Maximum Instantaneous Forward Voltage at 1.0A (Note 1)	VF	0.50		0.70		0.85	V	
Maximum DC Reverse Current (Note 1) Ta= 25°C at Rated DC Blocking Voltage Ta=100°C	IR	0.5					20.0	mA
Maximum Thermal Resistance (Note 2)	RθJL RθJA	28.0					88.0	°C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150					°C	

NOTES:

- A.Pulse Test with PW =300usec, 2% Duty Cycle.
- B.Mounted on P.C. Board with 5.0mm2 (.013mm thick) copper pad areas.

DEVICE CHARACTERISTICS

MB12S THRU MB110S

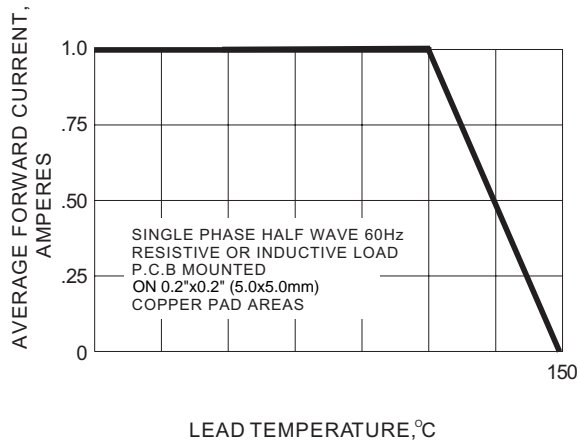


Fig.1-FORWARD CURRENT DERATING CURVE

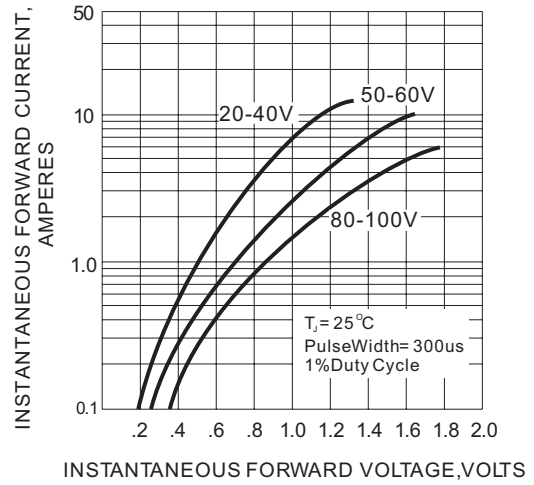


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

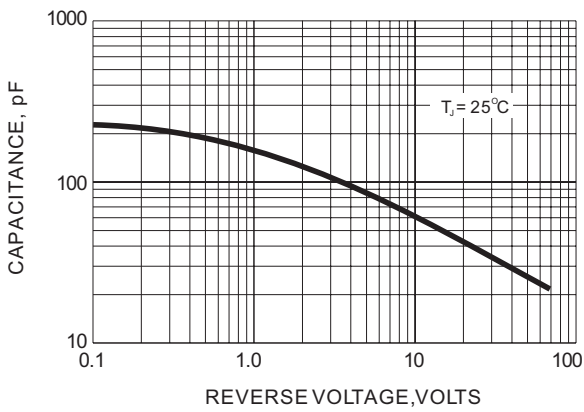


Fig.3-TYPICAL JUNCTION CAPACITANCE

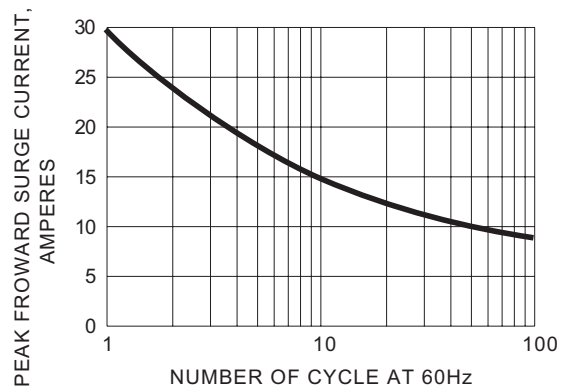


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT