MB1S THRU MB10S

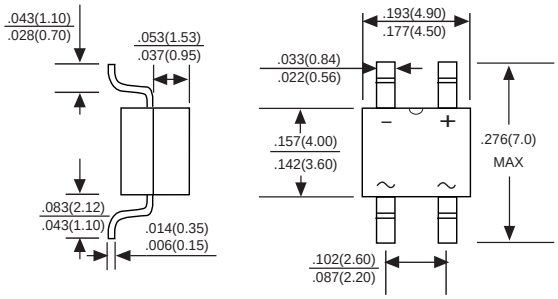
Voltage Range - 100 to 1000 V olts Current - 1.0Ampere

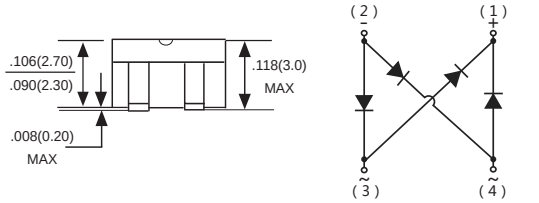
SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

MBS RoHS COMPLIANT

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- Small size, simple installation
- High surge current capability





Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC MBS Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0035 ounce, 0.1 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

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

Parameter / Marking Code	SYMBOLS	MDD MB1S	MDD MB2S	MDD MB4S	MDD MB6S	MDD MB8S	MDD MB10S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current at Tc=115℃	$I_{F(AV)}$	1.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35						A
Rating for Fusing(t<8.3ms)	I^2t	5.08						A^2s
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.1						V
Maximum DC reverse current T_A=25℃ / at rated DC blocking voltage T_A=125℃	I_R	5.0 / 40						uA
Typical junction capactiance per leg(Note1)	C_J	13						pF
Typical thermal resistance per leg (Note2)	$R\theta_{JA}$ / $R\theta_{JC}$	85 / 25						℃/W
Operating temperature range	T_J	-55 to +150						℃
storage temperature range	T_{STG}	-55 to +150						℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.
2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

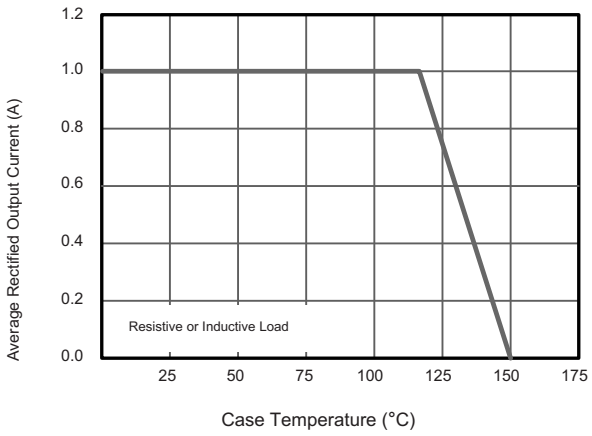


Fig.2 Typical Reverse Characteristics

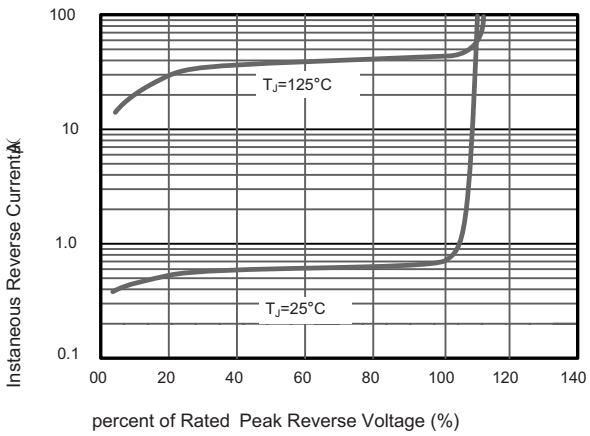


Fig.3 Typical Instaneous Forward Characteristics

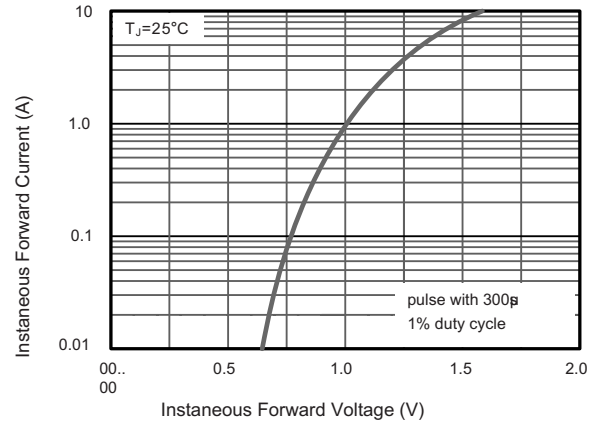


Fig.4 Typical Junction Capacitance

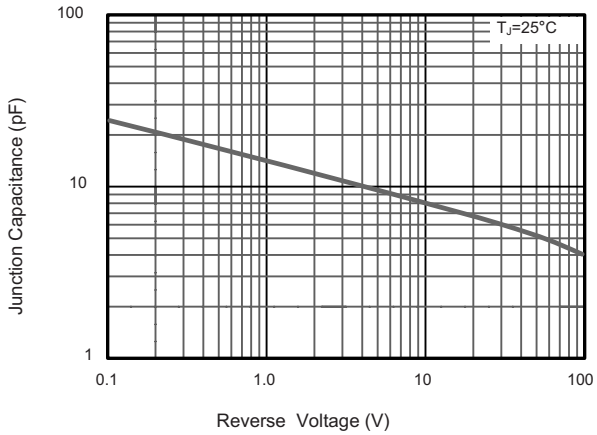
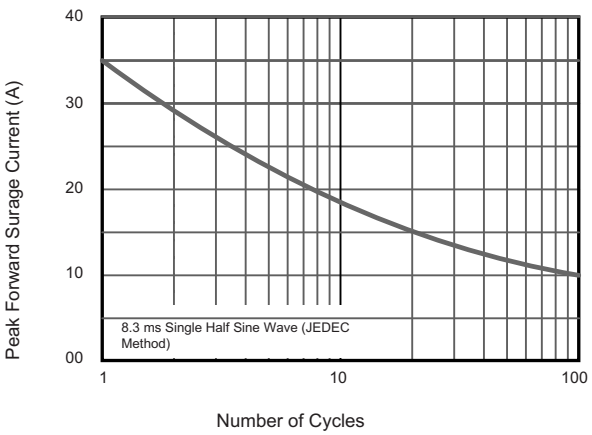
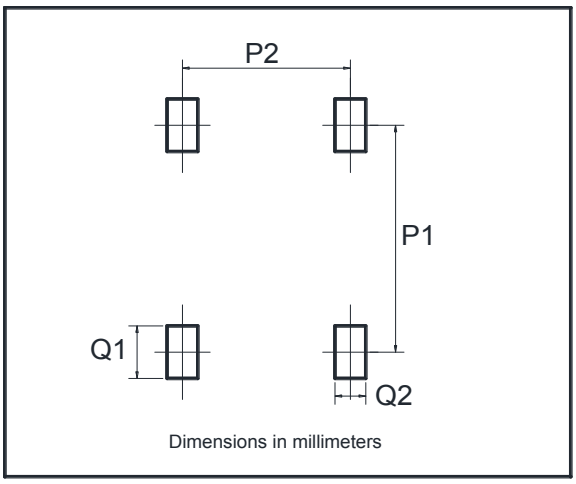


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



Suggested Pad Layout



Dim	Min
P1	6.00
P2	2.40
Q1	1.84
Q2	1.20