

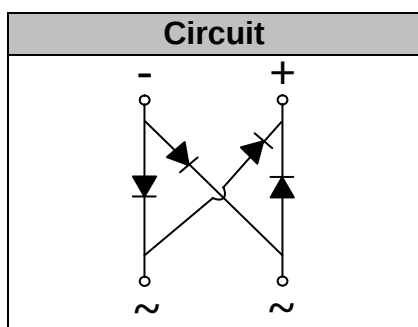
Glass Passivated Single Phase Bridge Rectifiers



Reverse Voltage 200 to 1000V
Forward Current 0.5 Amp

Features

- Glass passivated die construction
- Ideal for automatic insertion
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability



Mechanical Data

Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any

Module Type

TYPE	VRRM	VRSM
MB2S	200V	300V
MB4S	400V	500V
MB6S	600V	700V
MB8S	800V	900V
MB10S	1000V	1100V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
IF(AV)	Maximum average forward output rectified current Tc = 40°C	0.5	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	30	A
i ² t	Rating for fusing (t<8.3ms)	3.7	A ² s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
RθJA RθJL	Typical thermal resistance per leg	60 ⁽¹⁾ 16 ⁽²⁾	°C/W
Tj, TSTG	Operating Junction and storage temperature range	-55 to +150	°C

Electrical Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
VFM	Maximum Instantaneous Forward Voltage per leg IFM = 0.8A	1.1	V
IR	Maximum DC reverse current at rated DC blocking voltage per leg TA = 25°C TA = 125°C	5.0 500	μA
CJ	Typical Junction Capacitance per leg VR=4.0V 1.0MHZ	13	pF

Notes: (1) Mounted on glass epoxy PC board with 1.3mm² solder pad.
(2) Mounted on aluminum substrate PC board with 1.3mm² solder pad.

Performance Curves

Fig. 1 Output Current Derating Curve

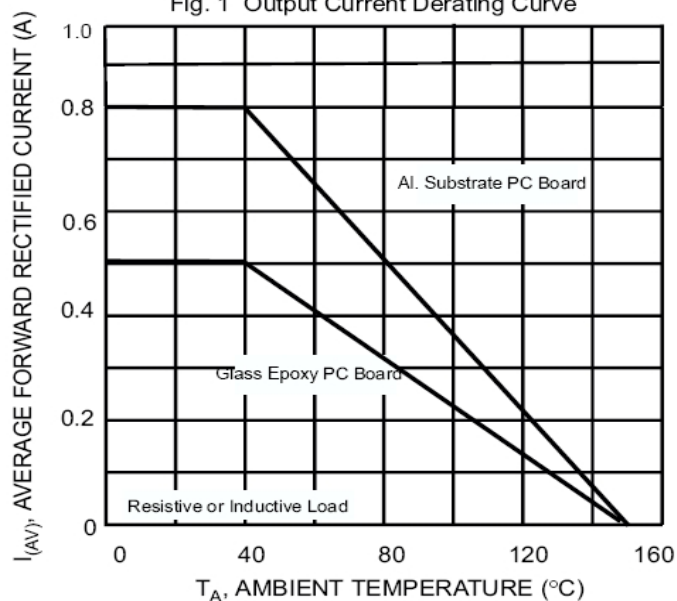


Fig. 2 Typical Forward Characteristics (per leg)

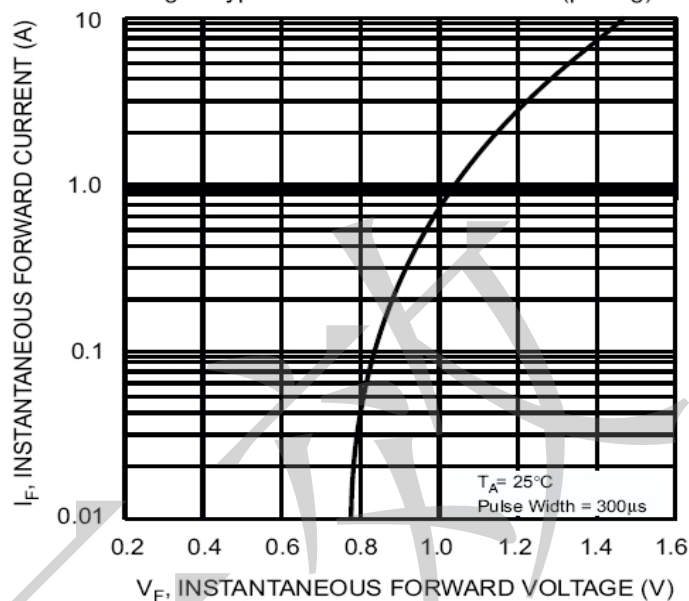


Fig. 3 Maximum Peak Forward Surge Current (per leg)

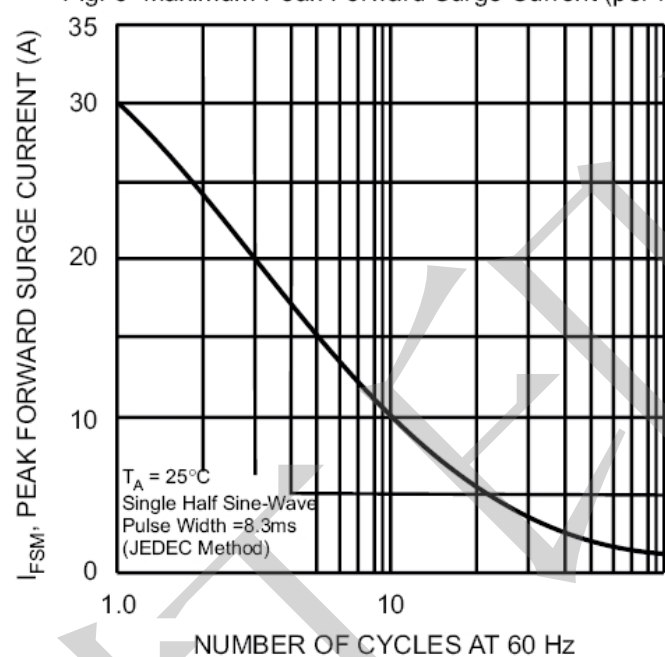
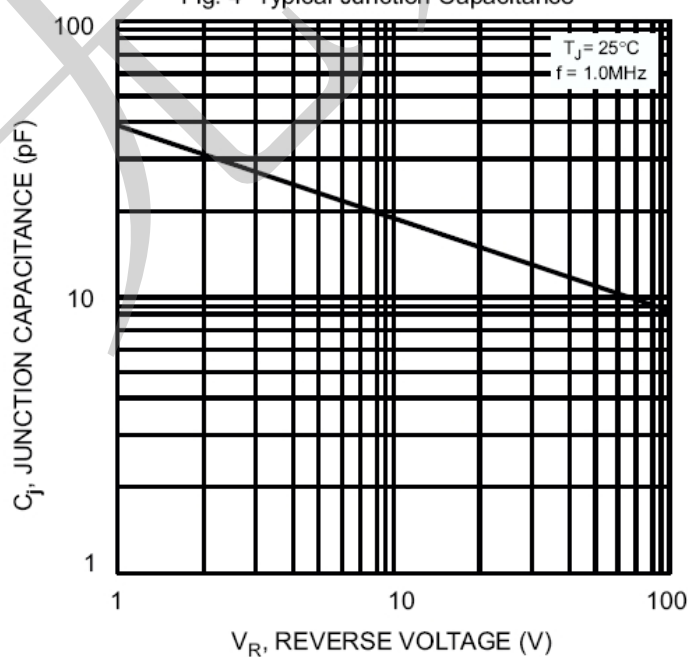
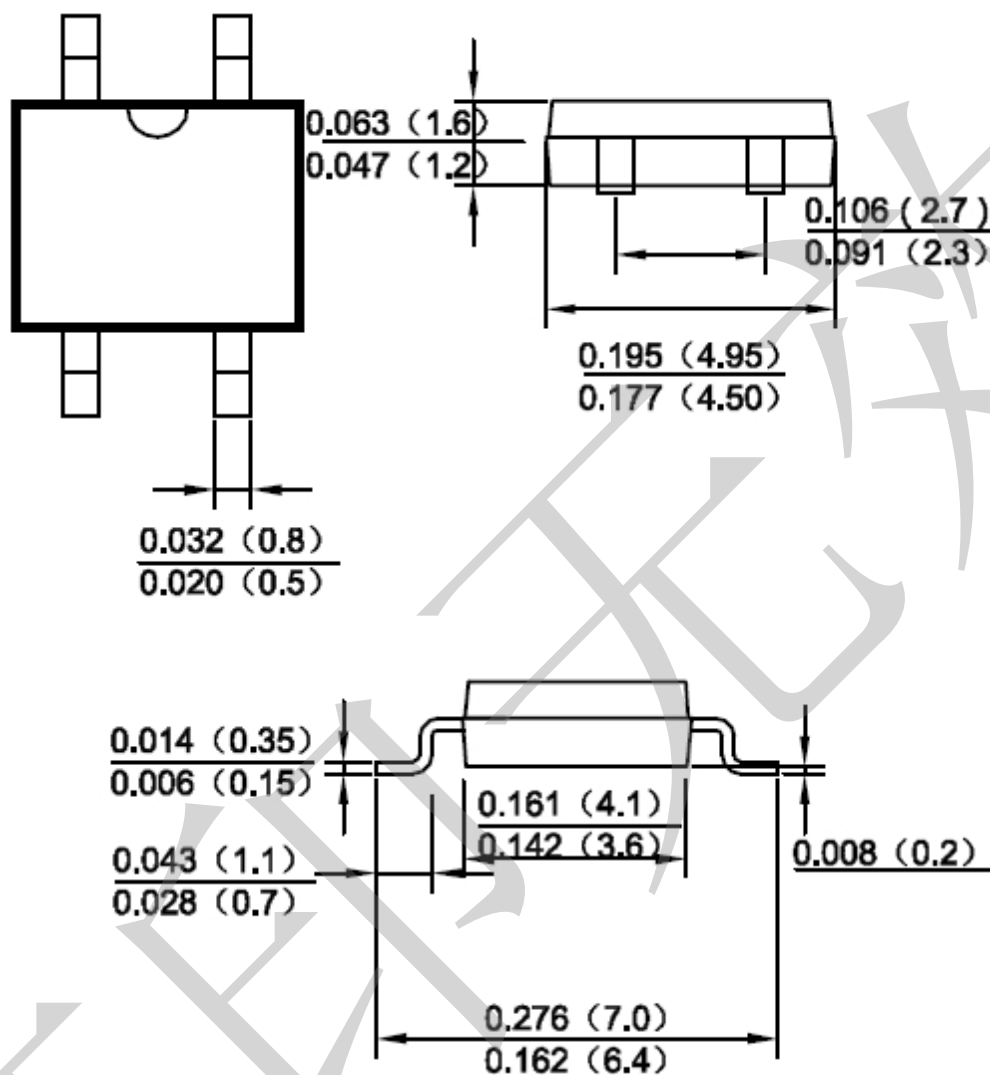


Fig. 4 Typical Junction Capacitance



Package Outline Information

CASE: MBS-1



Dimensions in inches (mm)