

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

Reverse Voltage 200to1000 Volts ForwardCurrent 0.8 Amperes

Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High surge current capability
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junction

Mechanical Data

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

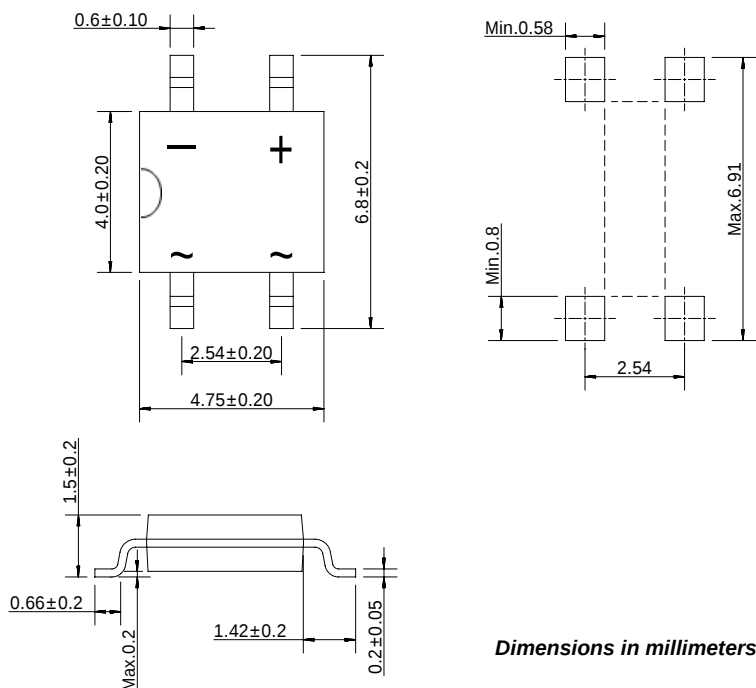
High temperature soldering guaranteed:

260°C/20 seconds

Mounting Position: Any

Weight: 0.07oz., 0.2g

Case Style: MBF



Dimensions in millimeters

Absolute Maximum Ratings TL=25 °C unless otherwise specified.							
Parameter	Symbol	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	V
Maximum average forward output on glass-epoxy P.C.B.	I _{F(AV)}	0.5 ⁽¹⁾					A
current rectified (see Fig.1) on aluminum substrate		0.8 ⁽²⁾					
Peak forward surge current single sine-wave	I _{FSM}	30					A
superimposed on rated load (JEDEC Method)							
Rating for fusig (t<8.3ms)	I ² t	3.7					A ² sec
Typical junction capacitance per leg at 4.0V 1.0Mhz	CJ	13					pF
Operating junction temperature range	TJ	-55 to +150					°C
Storage temperature range	T _{STG}	-55 to +150					°C

Electrical Characteristics TL=25°C unless otherwise specified.			
Maximum instantaneous forward voltage drop per leg at 0.4A	VF	1.00	V
Maximum DC reverse current at Tj=25°C	IR	5	μA
rated DC blocking voltage per leg Tj=125°C		100	
Typical thermal resistance per leg	RθJA	70 ⁽²⁾	°C/W
	RθJA	85 ⁽¹⁾	
	RθJL	20 ⁽¹⁾	

Notes:

(1) On glass epoxy P.C B mounted on 0.05"×0.05"(1.3×1.3mm) pads

(2) On aluminum substrate P.C B.with an area of 0.8"×0.8" (20×20mm) mounted on 0.05"×0.05"(1.3×1.3mm)solder pad

■ Ratings and Characteristic Curves (TA= 25°C unless otherwise noted)

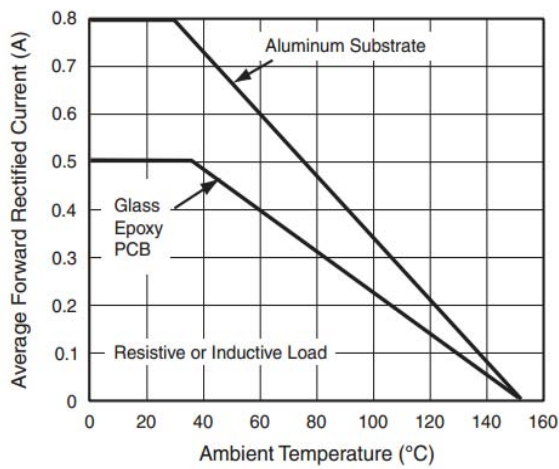


Fig. 1 - Derating Curve for Output Rectified Current

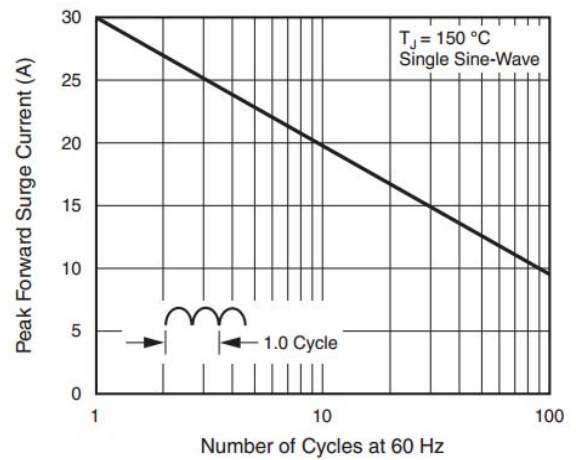


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

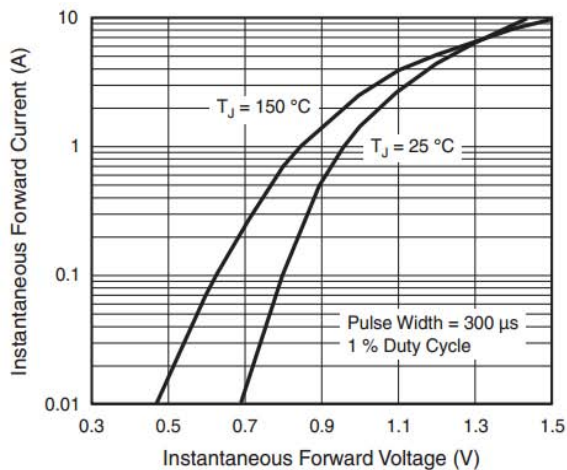


Fig. 3 - Typical Forward Voltage Characteristics Per Diode

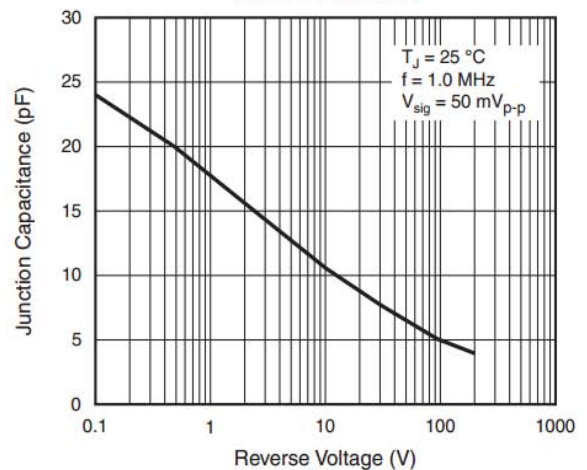


Fig. 5 - Typical Junction Capacitance Per Diode

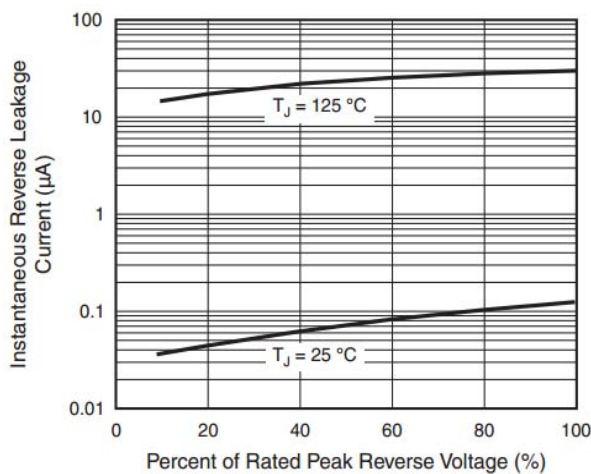


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode