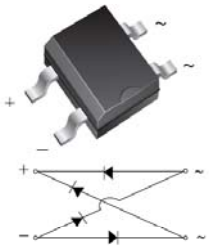
MB2S-MB10S

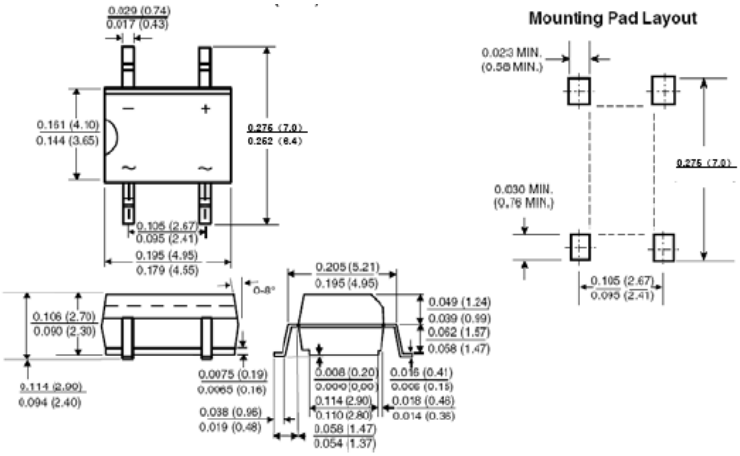
Miniautre Glass Passivated Single-Phase Surface Mount Bridge Rectifier

Reverse Voltage 200 to 1000 Volts Forward Current 0.5 Ampere



Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating:35A peak
- ◆ Saves space on printed circuit boards
- ◆ High temperature soldering guaranteed:260℃/10 seconds



Mechanical Data

- ◆ Case:Molded plastic body over passivated junctions
- ◆ Terminals: plated leads solderable per MIL-STD-750, Method 2026
- ◆ Mounting Position:Any
- ◆ Weight:0.078 oz.,0.22g

Maximum Ratings & Electrical Characteristics

(T_A=25℃ unless otherwise noted)

Parameter	Symbol	MB2S	MB4S	MB6S	MB8S	MB10S	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 current (see Fig.1) on glass-epoxy P.C.B on aluminum substrate	$I_{F(AV)}$	0.5(1) 0.8(2)					A
Peak forward surge current 8.3 MS single HALF sine-wav superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
Rating for fusig (t<8.3ms)	I^2t	5					A^2sec
Maximum instantaneous forward voltage drop per leg at 0.4A	VF	1.00					V
Maximum DC reverse current at TA=25℃ rated DC blocking voltage per leg TA=125℃	IR	5 100					μA
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	85(1) 70(2) 20(1)					℃/W
Typical junction capacitance per at 4.0V,1.0MHz	Cj	13					pF
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150					℃

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.whth an area of 0.8×0.8"（20×20mm）mounted on 0.05×0.05"(1.3×1.3mm) solder pad

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

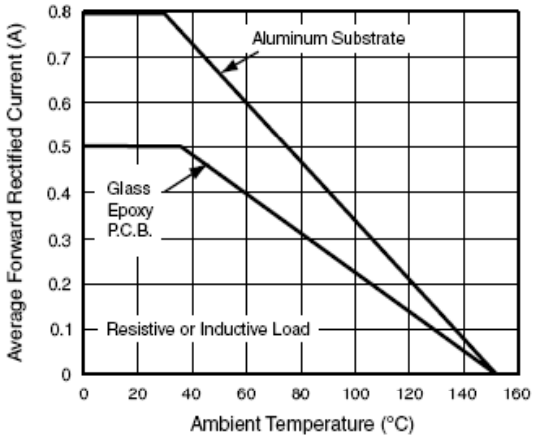


Figure 1.Derating Curve for Output Rectified Current

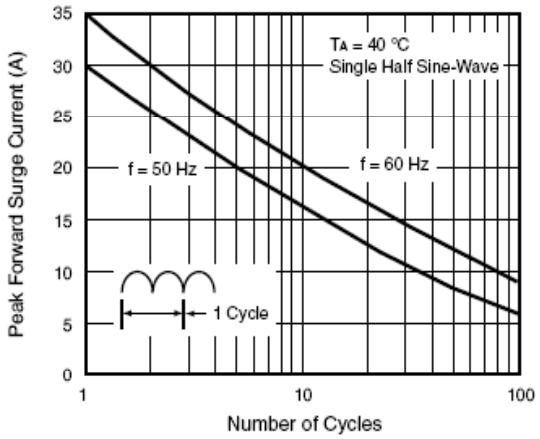


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current Per Leg

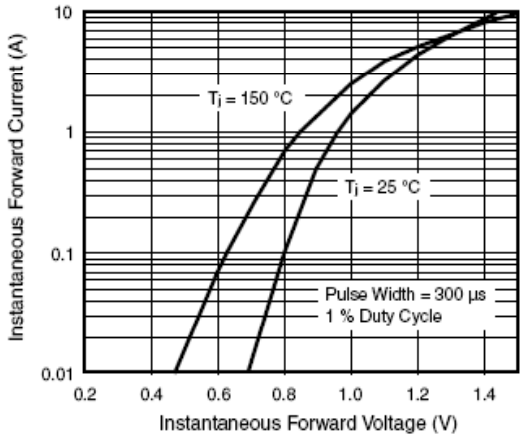


Figure 3.Typical Forward Voltage Characteristics Per Leg

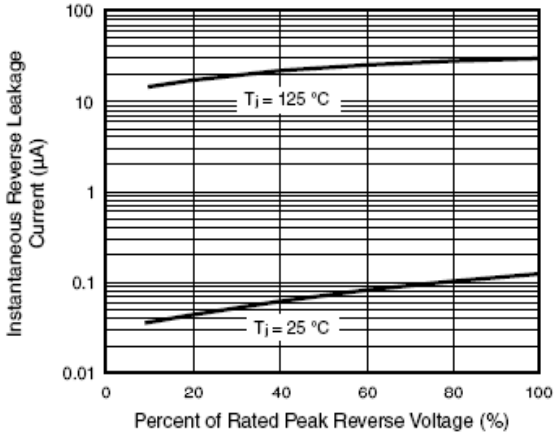


Figure 4.Typical Reverse Leakage Characteristics Per Leg

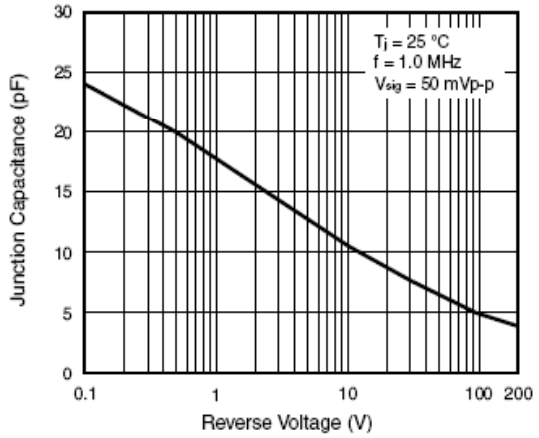


Figure 5.Typical Junction Capacitance Per Leg