Single Phase 0.8Amp Glass passivated Bridge Rectifiers

Features

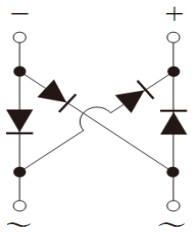
- ✧ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ✧ Idea for printed circuit board
- ✧ Glass passivated Junction chip
- ✧ High forward surge current capability
- ✧ High temperature soldering guaranteed
- ✧ 250 ℃/10 seconds at terminals

Mechanical Data

- ✧ Case : Molded plastic body
- ✧ Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
- ✧ Polarity : Polarity symbol marking on body
- ✧ Mounting Position : Any
- ✧ RoHS/WEEE Compliant
- ✧ Weight : 0.004 ounce, 0.118 grams

Applications

- ✧ LED lighting
- ✧ Various low-power power suppliese



Circuit Diagram



MBS

Maximum Ratings And Electrical Characteristics

Ratings at 25 C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	SYMBOLS	OVMB2S	OVMB4S	OVMB6S	OVMB8S	OVMB10S	UNITS
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 rectified current at T_L=100℃ On glass-epoxy P.C.B (Note 1)	$I_{(AV)}$	0.8					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0					A
Rating for fusing (t=8.3ms, Ta=25℃)	I^2t	3.74					A^2s
Maximum instantaneous forward voltage at 0.8A	V_F	1.10					V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500					uA
Typical junction capacitance (Note 2)	C_J	15.0					pF
Typical thermal resistance	$R_{\theta JA}$	85.0					°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150					°C

Note:1.Mounted on glass epoxy PC board with 1.3*1.3mm solder pad
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

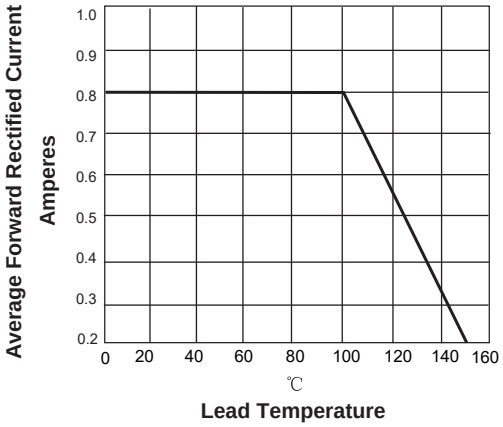


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

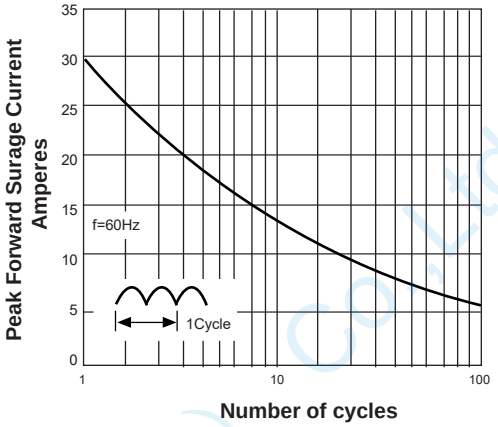


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

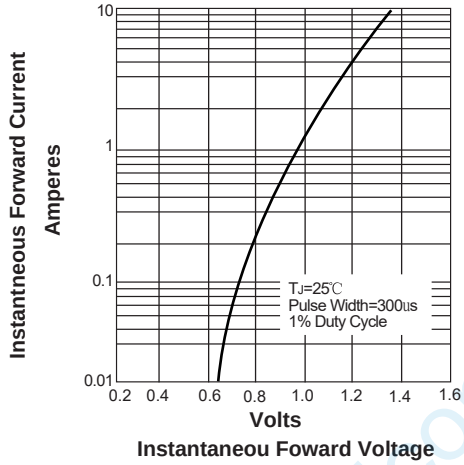
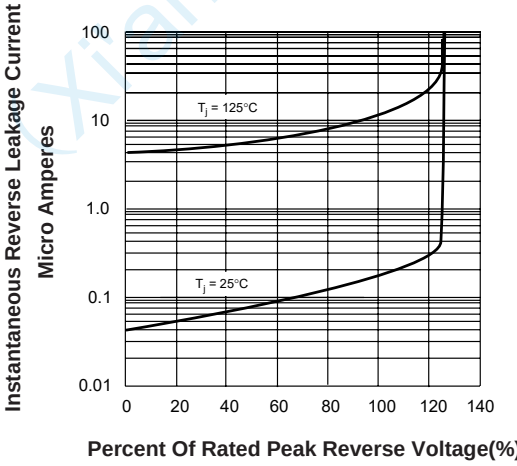
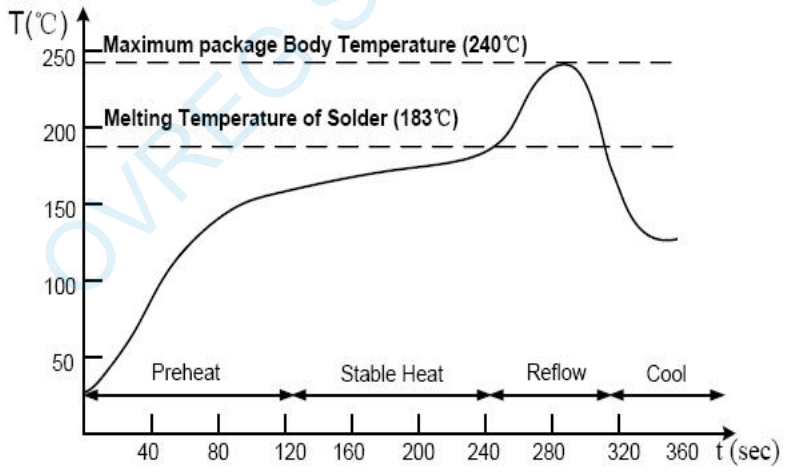


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Suggested Soldering Temperature Profile

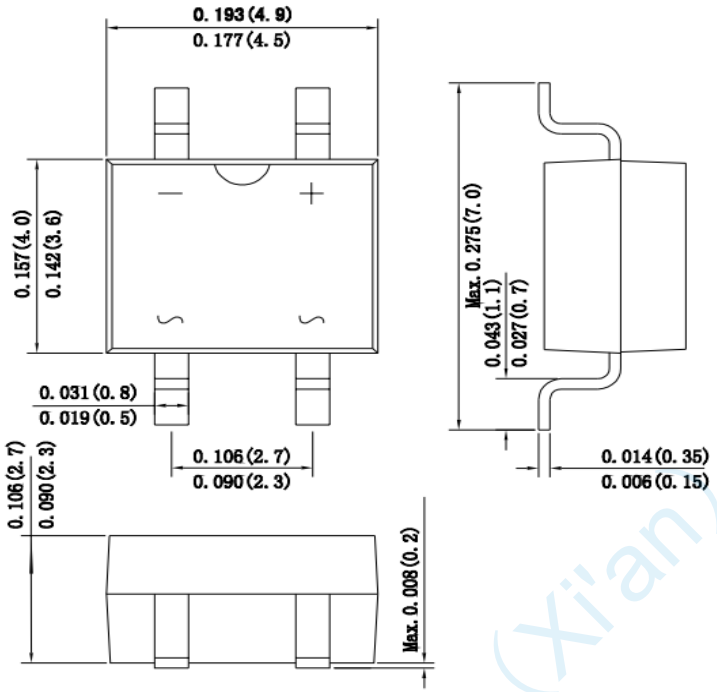


Note

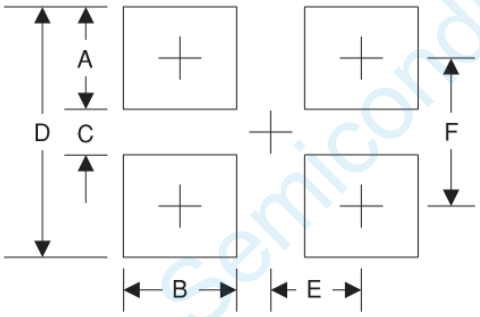
1.Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
2.The device can be exposed to a m aximum temperature of 265°C for 10 seconds.
3.Devices can be cleaned using standard industry methods and solvents.
4.If reflow temperatures exceed the recom mended profile, devices may not meet the performance requirements.

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Package Information

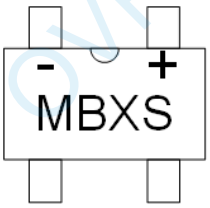


Recommend PCB Layout



Symbol	Unit (mm)	Unit (inch)
A	1.7	0.067
B	1.0	0.039
C	4.40	0.173
D	8.10	0.319
E	1.25	0.049
F	6.30	0.248

Marking



X: Voltage Code
2---V_{RRM}=200V
4---V_{RRM}=400V
6---V_{RRM}=600V
8---V_{RRM}=800V
10---V_{RRM}=1000V

Ordering Information

Part number	Material	Type	Reel size	MOQ	MOQ/internal box	MOQ/carton
OVMBxS Series	GREEN	T/R	13 inch	3k/reel	2reel= 6k/box	8boxes=48k/carton

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