SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Feature

- Glass Passivated Die Construction
- Low Forward Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application

Maximum Ratings and Electrical characteristics

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

Parameter	Symbol	MB 1S	MB 2S	MB 4S	MB 6S	MB 8S	MB 10S	Units
Peak repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Averager Rectified Output Current (Note 1) @T_A=40℃ Averager Rectified Output Current (Note 2) @T_A=40℃	I_O	0.5 0.8						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on rated Load(JEDEC Method)	I_{FSM}	30						A
I^2t Rating for Fusing(t<8.3ms)	I^2t	3.7						A^2s
Forward Voltage per element @ I_F=0.4A	V_{FM}	1.05						V
Peak Reverse Current T_A=25℃ at Rated DC Blocking Voltage T_A=125℃	I_{RM}	10.0 500						μA
Typical Junction Capacitance per leg (Note 3)	C_j	13						pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\Theta jl}$	134 20						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150						℃

Note:

1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.

Typical Characteristics

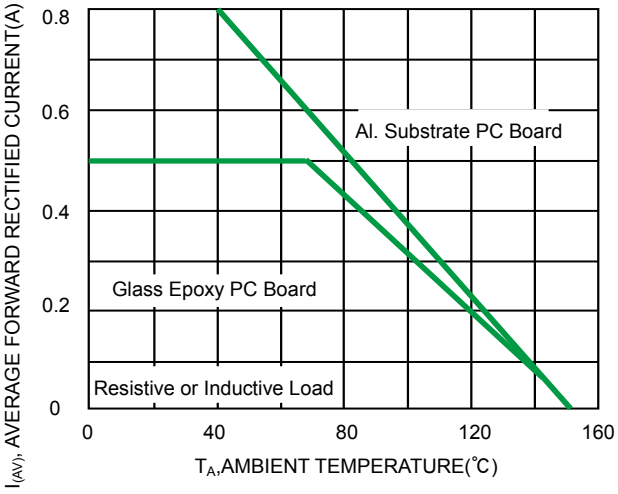


Fig 1 Output Current Derating Curve

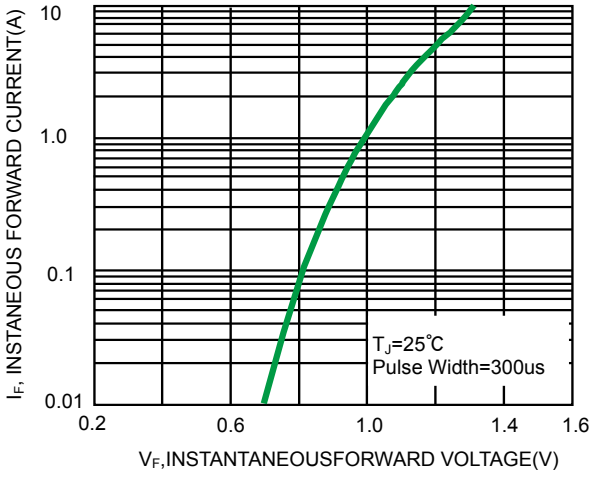


Fig 2.Typical Forward Characteristics (per leg)

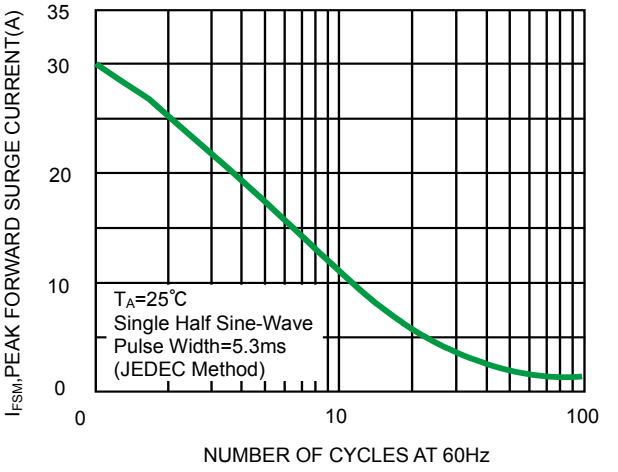


Fig 3.Maximum Peak Forward Surge Current(per leg)

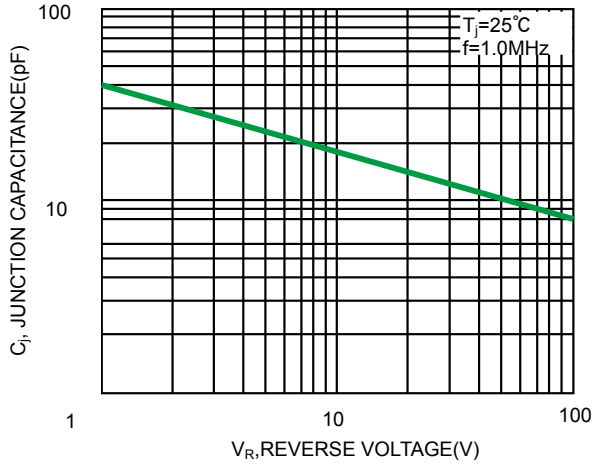
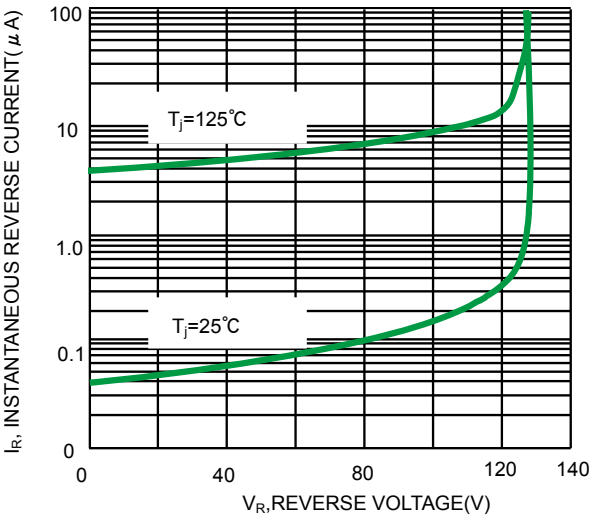


Fig 4. Typical Junction Capacitance



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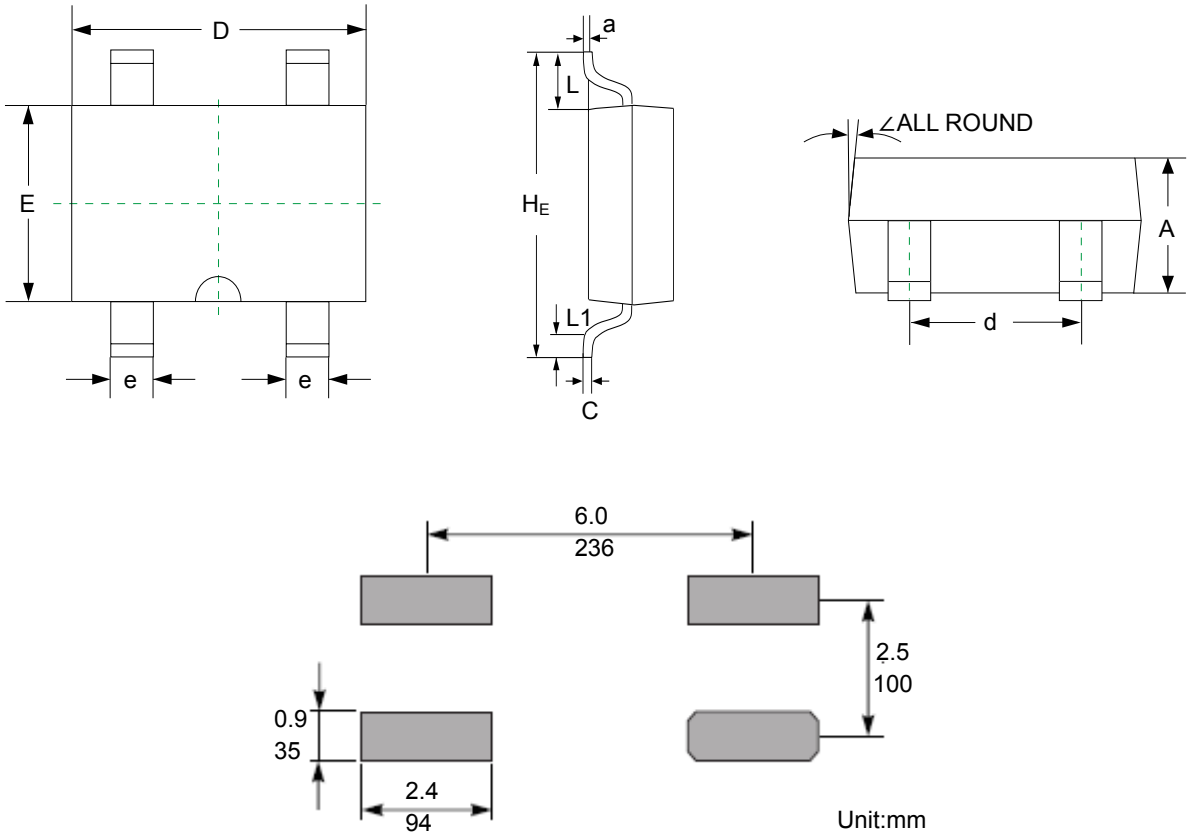
Product dimension (MBS)



Dim	Millimeters	
	MIN	MAX
A	2.20	2.60
C	0.15	0.22
D	4.50	5.00
E	3.60	4.10
H_E	6.40	7.00
d	2.30	2.70
e	0.50	0.70
L	1.30	1.70
L1	0.50	1.10
a	--	0.20
∠	7°	

Ordering information

Device	Package	Shipping
MB1S ~MB10S	MBS (Pb-Free)	3000 / Tape & Reel

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