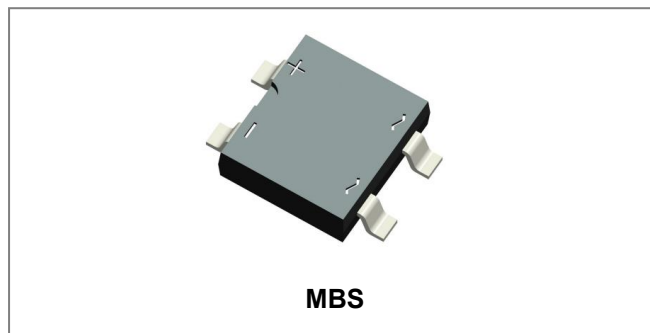


MB1SU THRU MB10SU

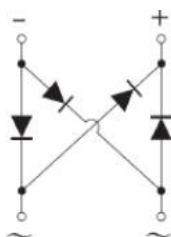
Single-Phase 1A Surface Mount Glass Passivated Bridge Rectifier



Features

- Glass passivated die construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-35A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: Reliable low cost construction utilizing molded plastic technique
- Terminals: Plated Leads Solderable per MIL STD-202, Method208
- Polarity: As Marked on Case
- Mounting Position: Any

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	MB1SU	MB2SU	MB4SU	MB6SU	MB8SU	MB10SU	Units
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	70	140	280	420	480	700	V
Average Rectified Output Current (Note1)@ $T_A=40^{\circ}\text{C}$	I_o	1						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35						A

Electrical Characteristics: @T_A=25°C unless otherwise specified

Type Number	Symbol	MB1SU	MB2SU	MB4SU	MB6SU	MB8SU	MB10SU	Units
Forward Voltage per element @I _F = 0.5A @I _F = 1.0A	V _{FM}				0.95 1.1			V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _R				5 500			μA
Typical Junction Capacitance (Note 2)	C _j				13			pF

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications: @T_A=25°C unless otherwise specified

Type Number	Symbol	MB1SU	MB2SU	MB4SU	MB6SU	MB8SU	MB10SU	Units
Typical Thermal Resistance per leg	R _{θJA}				70			°C/W
	R _{θJL}				20			
Operating Junction and Storage Temperature Range	T _J , T _{STG}				-55+150			°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

Ratings and Characteristics Curves

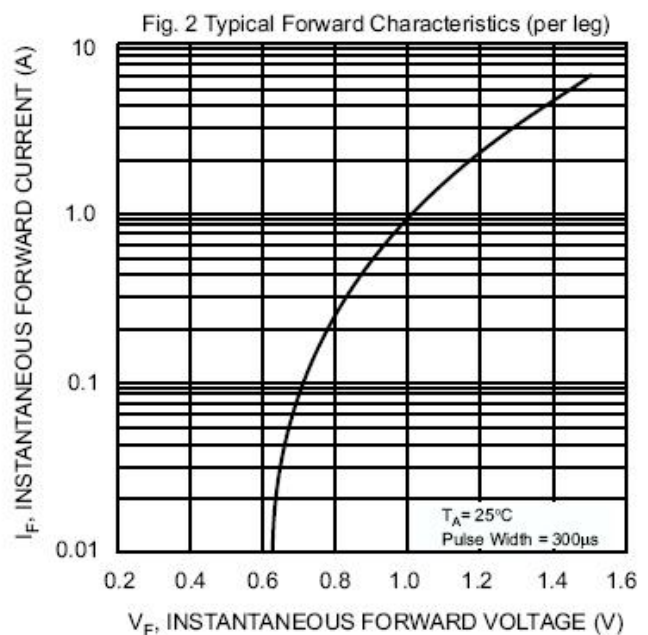
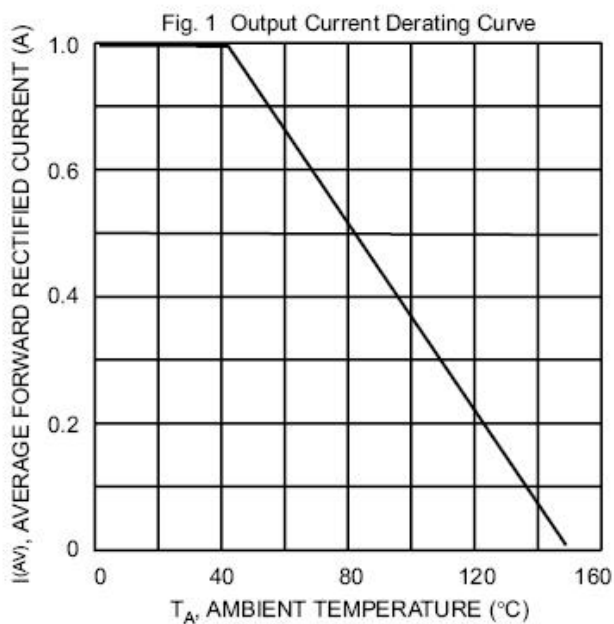


Fig. 3 Maximum Peak Forward Surge Current (per leg)

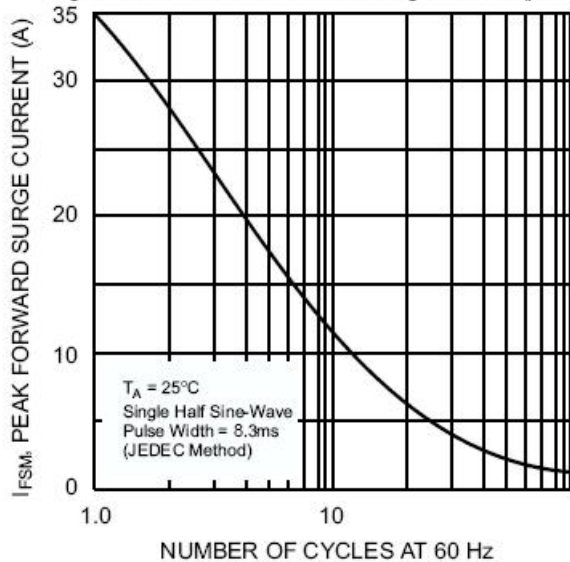


Fig. 4 Typical Junction Capacitance

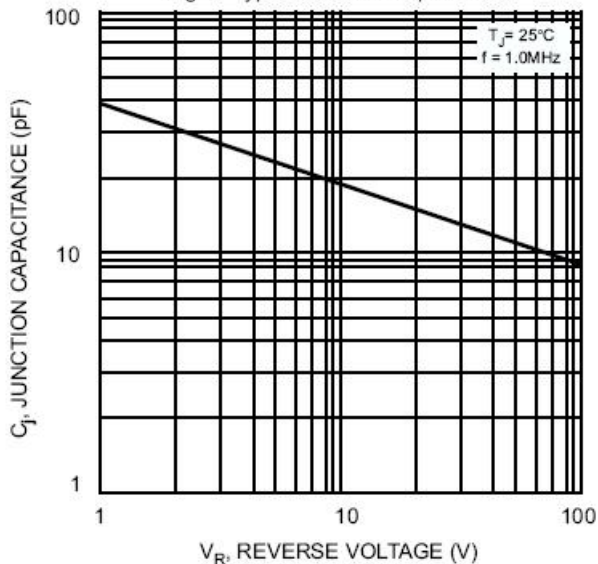
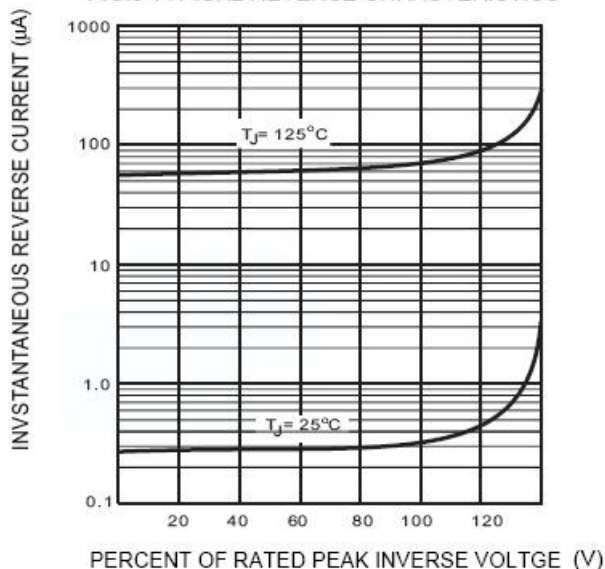


FIG.5 TYPICAL REVERSE CHARACTERISTICS

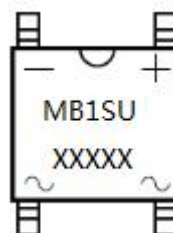


Ordering Information

Device	Package	Plating	Shipping
MB1SU THRU MB10SU	MBS (Pb-Free)	Pure Sn	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

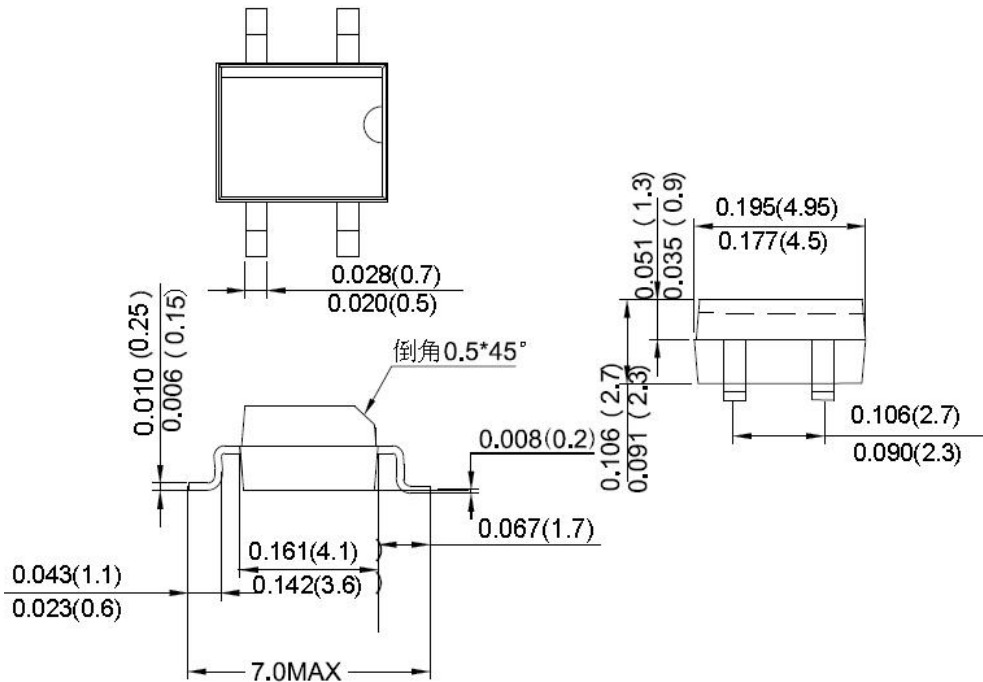


Where XXXXX is YYWWL

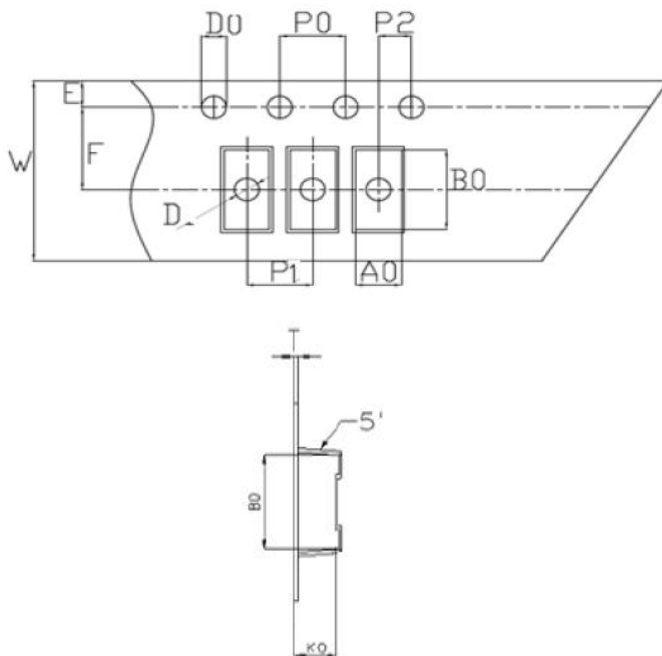
MB1SU = Type Number
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions MBS(Inches/Millimeters)



Carrier Tape Specification MBS



SYMBOL	Millimeters	
	Min.	Max.
A0	4.92	5.12
B0	7.12	7.32
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	2.78	2.98
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20
抗拉拉力	≥3KG	



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