WON-TOP ELECTRONICS

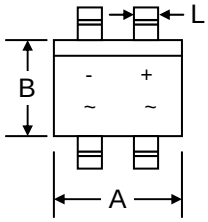
B1S – B10S

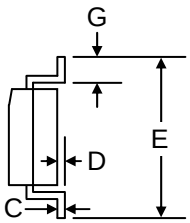
0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

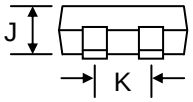
RoHS Pb

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Reliability
- High Surge Current Capability
- Design for Surface Mount Application
- Plastic Material – UL Flammability 94V-0
- Recognized File # E157705







MB-S		
Dim	**Min**	**Max**
A	4.50	4.90
B	3.60	4.00
C	0.15	0.35
D	—	0.20
E	—	7.00
G	0.70	1.10
J	2.30	2.70
K	2.20	2.60
L	0.56	0.84
All Dimensions in mm		

Mechanical Data

- Case: MB-S, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.12 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	B1S	B2S	B4S	B6S	B8S	B10S	Unit
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	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T_A = 40°C Average Rectified Output Current (Note 2) @T_A = 40°C	I_O	0.8 0.5						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	35						A
Forward Voltage per diode @I_F = 0.4A @I_F = 0.8A	V_{FM}	1.0 1.1						V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 500						μA
Typical Junction Capacitance per diode (Note 3)	C_J	13						pF
Thermal Resistance Junction to Ambient (Note 2) Thermal Resistance Junction to Ambient (Note 1) Thermal Resistance Junction to Lead (Note 2)	$R_{\theta JA}$ $R_{\theta JA}$ $R_{\theta JL}$	134 76 20						°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						°C

Note: 1. Mounted on aluminum substrate PCB with 1.3 x 1.3mm pad areas.
2. Mounted on glass epoxy PCB with 1.3 x 1.3mm pad areas.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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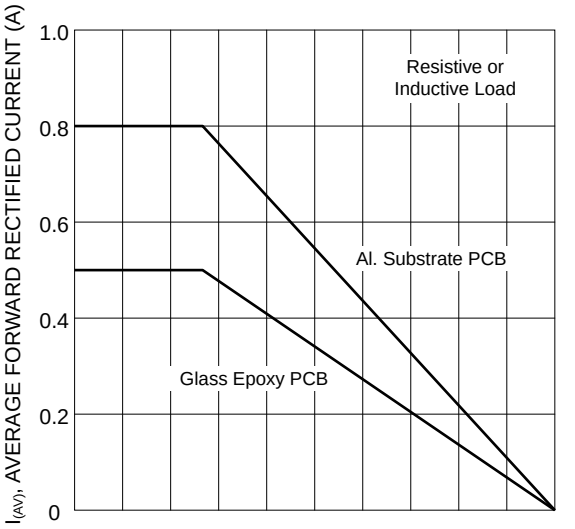


Fig. 1 Forward Current Derating Curve

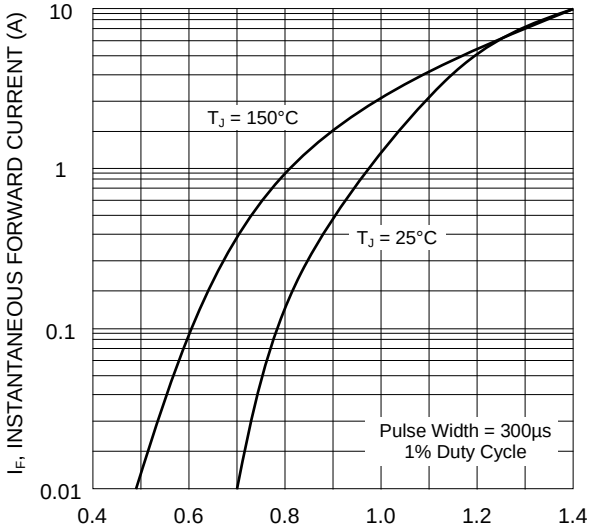


Fig. 2 Typical Forward Characteristics

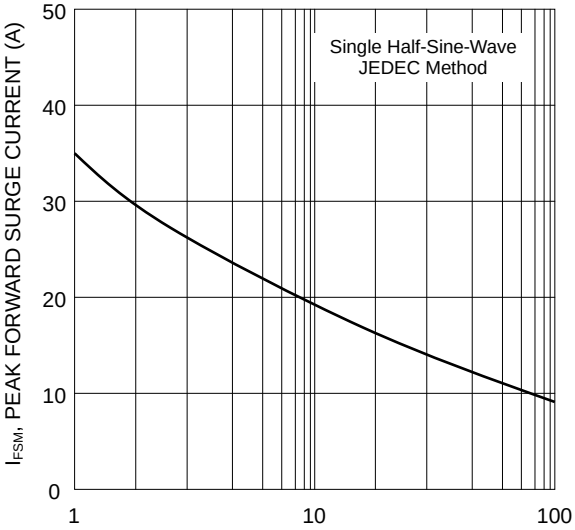


Fig. 3 Forward Surge Current Derating Curve

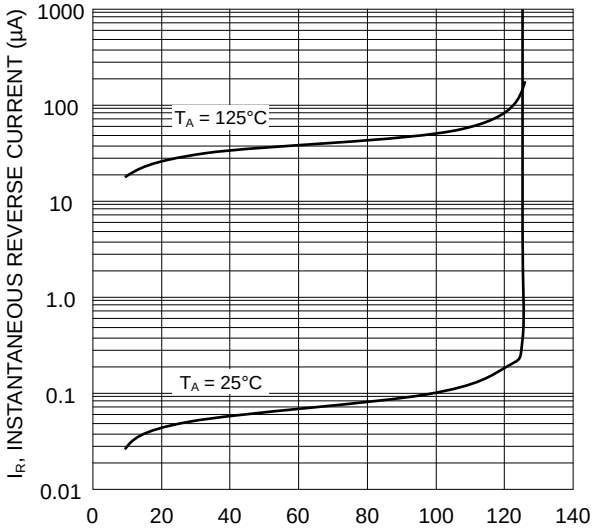


Fig. 4 Typical Reverse Characteristics

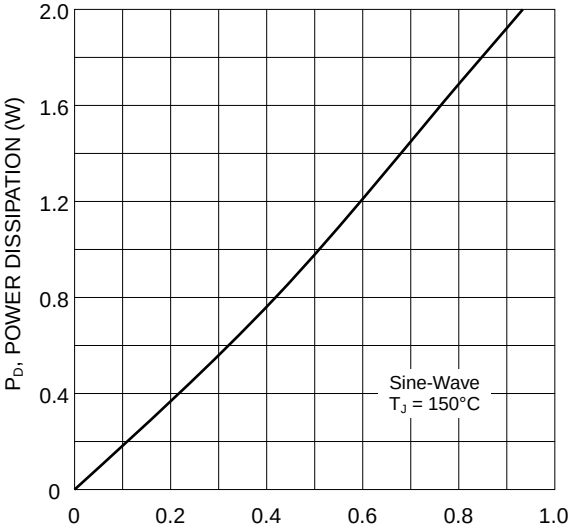


Fig. 5 Forward Power Dissipation

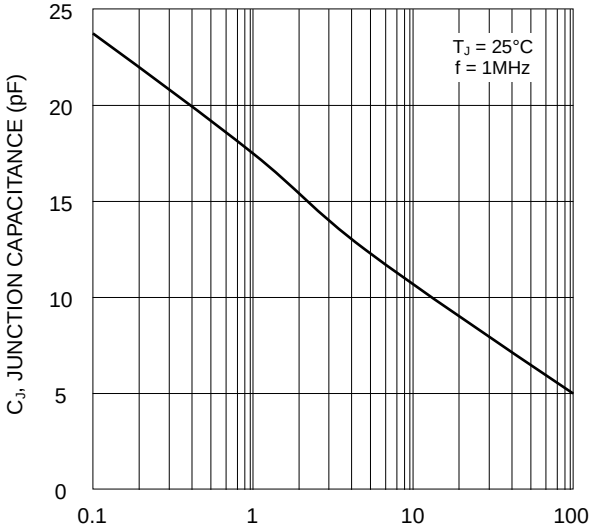
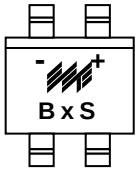


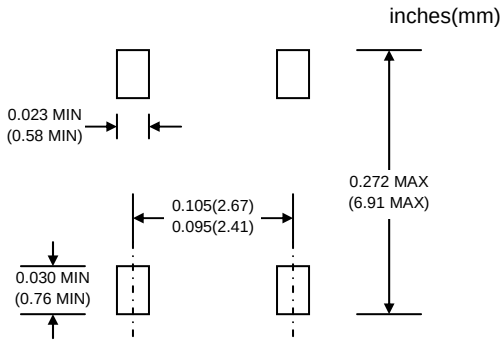
Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



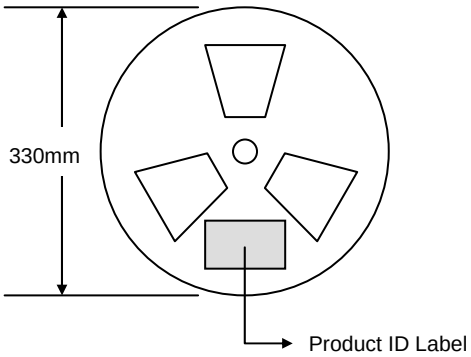
BxS	= Device Number
x	= 1, 2, 4, 6, 8 or 10
Polarity	= As Marked on Body

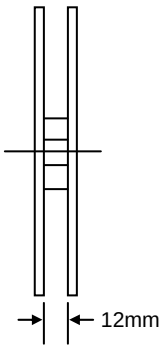
RECOMMENDED FOOTPRINT

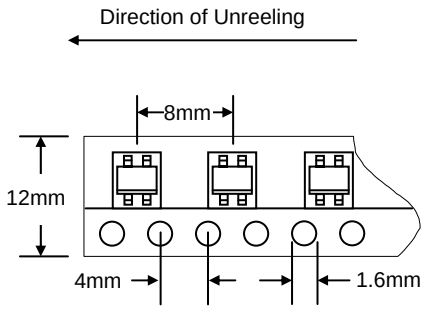


PACKAGING INFORMATION

TAPE & REEL







Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	15.0

Note: 1. Paper reel, white or gray color.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
B1S-T3	MB-S	3000/Tape & Reel
B2S-T3	MB-S	3000/Tape & Reel
B4S-T3	MB-S	3000/Tape & Reel
B6S-T3	MB-S	3000/Tape & Reel
B8S-T3	MB-S	3000/Tape & Reel
B10S-T3	MB-S	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, B1S-T3-LF**.

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We power your everyday.