



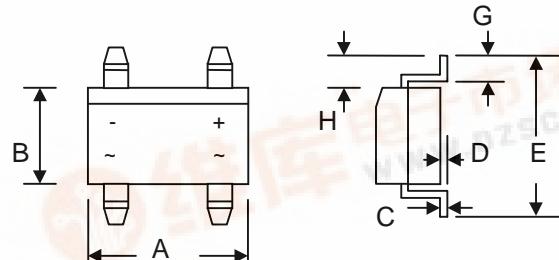
B1S – B10S



0.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

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



MB-S		
Dim	Min	Max
A	4.50	4.90
B	3.80	4.20
C	0.15	0.35
D	—	0.20
E	—	7.00
G	0.70	1.10
H	1.30	1.70
J	2.30	2.70
K	2.30	2.70
L	—	3.00

All Dimensions in mm

Mechanical Data

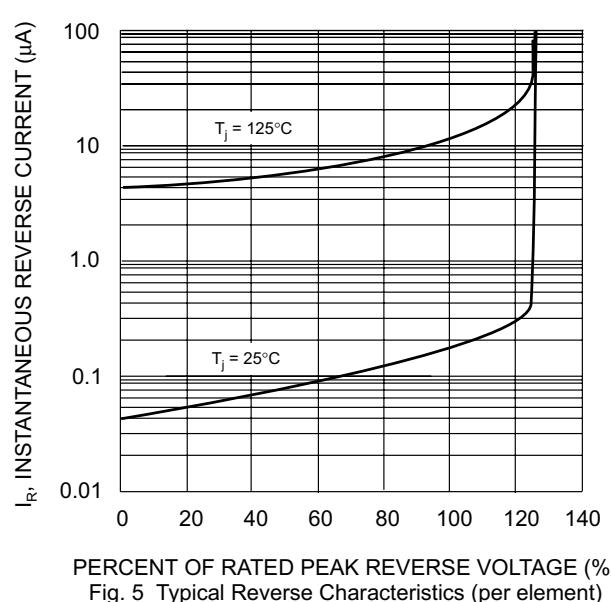
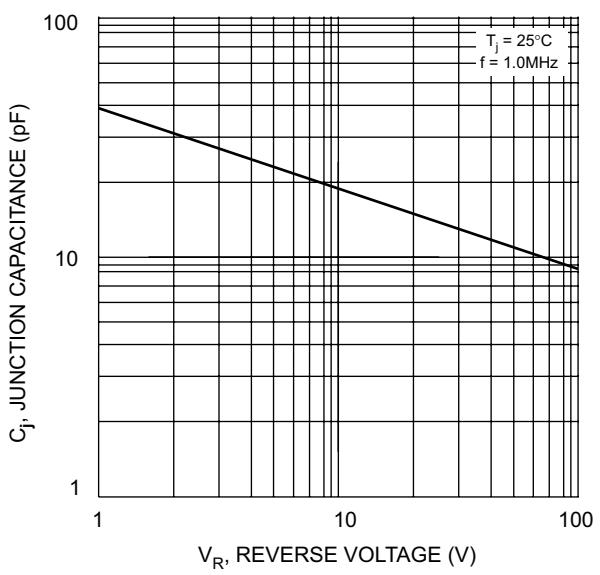
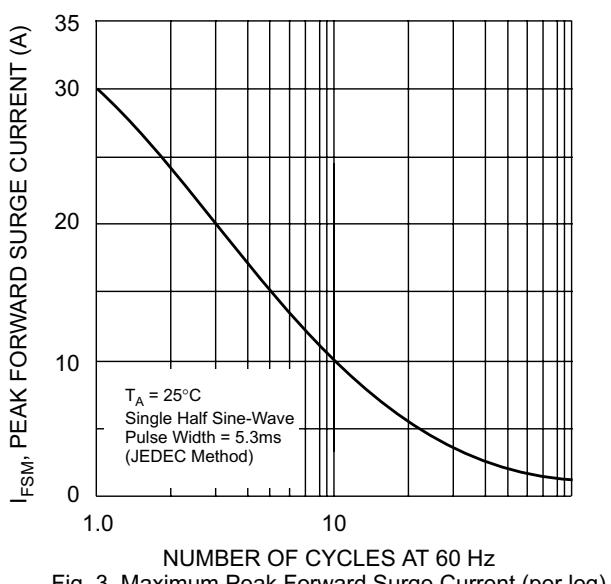
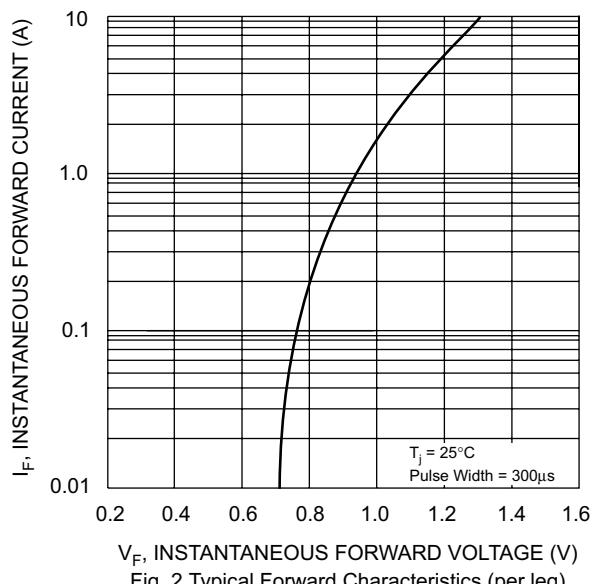
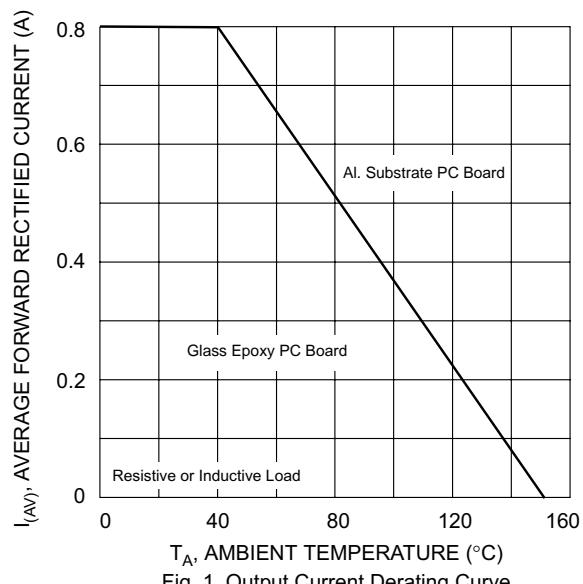
- Case: MB-S, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.22 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics $\text{@T}_A=25^\circ\text{C}$ unless otherwise specified

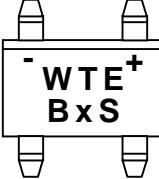
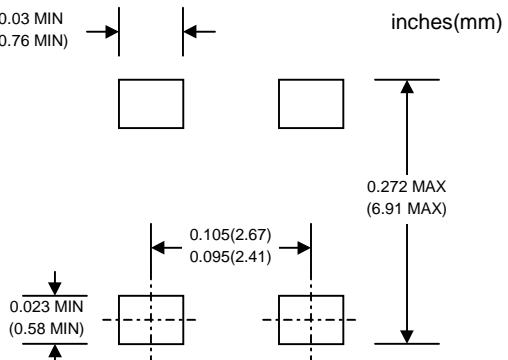
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

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) $\text{@T}_A = 40^\circ\text{C}$ Average Rectified Output Current (Note 2) $\text{@T}_A = 40^\circ\text{C}$	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 ($t < 8.3\text{ms}$)	I^2t			5.0				A^2s
Forward Voltage per element $\text{@I}_F = 0.5\text{A}$	V_{FM}			1.0				V
Peak Reverse Current $\text{@T}_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $\text{@T}_A = 125^\circ\text{C}$	I_{RM}			5.0	500			μA
Typical Junction Capacitance per leg (Note 3)	C_j			25				pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$			85	20			$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}			-55 to +150				$^\circ\text{C}$

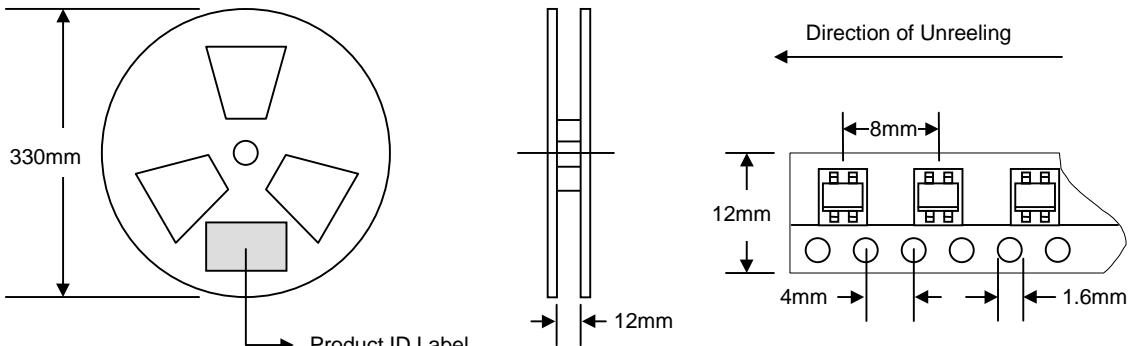
Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



MARKING INFORMATION

 <p> WTE = Manufacturer's Logo BxS = Device Number x = 1, 2, 4, 6, 8 or 10 Polarity = As Marked on Body </p>	 <p>inches(mm)</p> <p>0.03 MIN (0.76 MIN)</p> <p>0.023 MIN (0.58 MIN)</p> <p>0.105(2.67) 0.095(2.41)</p> <p>0.272 MAX (6.91 MAX)</p>
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PACKAGING INFORMATION

TAPE & REEL														
 <p>330mm</p> <p>Product ID Label</p> <p>12mm</p> <p>Direction of Unreeling</p>														
<table border="1" data-bbox="152 1522 1414 1641"> <thead> <tr> <th>Reel Diameter (mm)</th> <th>Quantity (PCS)</th> <th>Inner Box Size L x W x H (mm)</th> <th>Quantity (PCS)</th> <th>Carton Size L x W x H (mm)</th> <th>Quantity (PCS)</th> <th>Approx. Gross Weight (KG)</th> </tr> </thead> <tbody> <tr> <td>330</td> <td>3,000</td> <td>340 x 337 x 45</td> <td>6,000</td> <td>370 x 370 x 420</td> <td>48,000</td> <td>15.0</td> </tr> </tbody> </table> <p>Note: 1. Paper reel, white or gray color. 2. Components are packed in accordance with EIA standard 481-1 and 481-2.</p>	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
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330	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	15.0								

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
B1S-T3	Mini Bridge SMD	3000/Tape & Reel
B2S-T3	Mini Bridge SMD	3000/Tape & Reel
B4S-T3	Mini Bridge SMD	3000/Tape & Reel
B6S-T3	Mini Bridge SMD	3000/Tape & Reel
B8S-T3	Mini Bridge SMD	3000/Tape & Reel
B10S-T3	Mini Bridge SMD	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 Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, B1S-T3-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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