
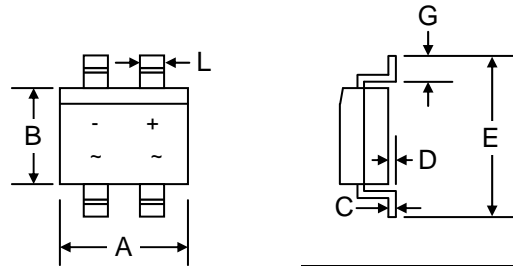


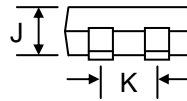
### Features

- 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



### 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**



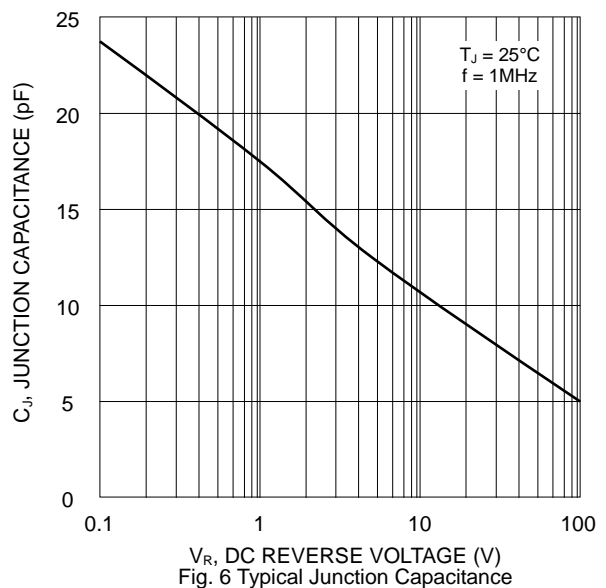
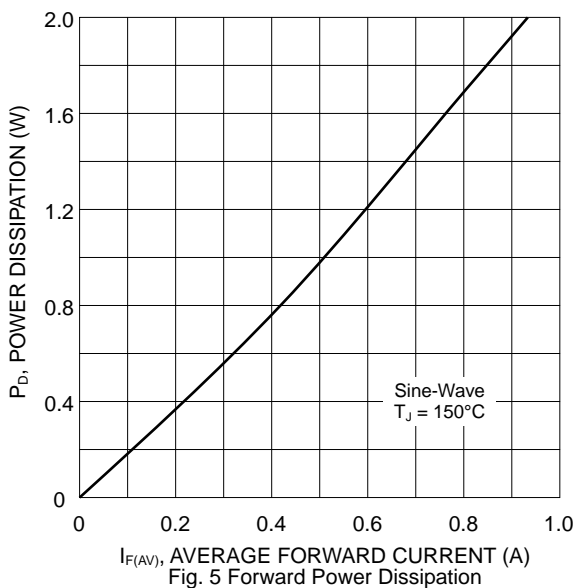
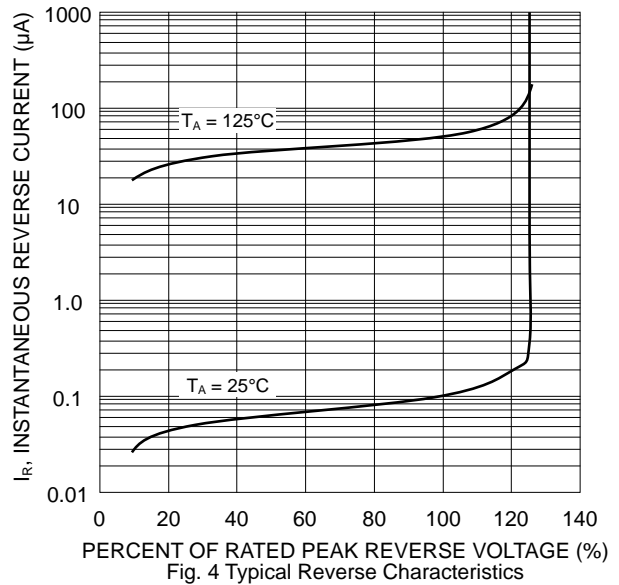
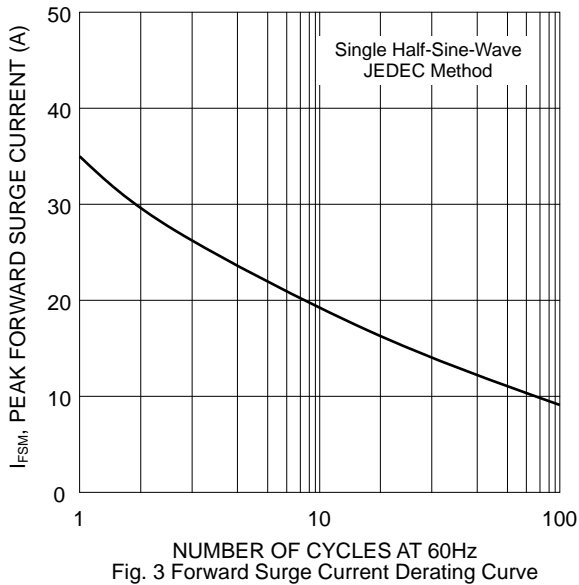
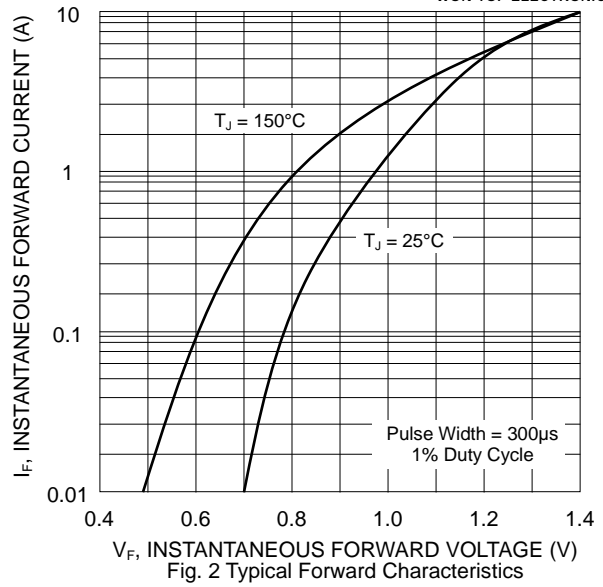
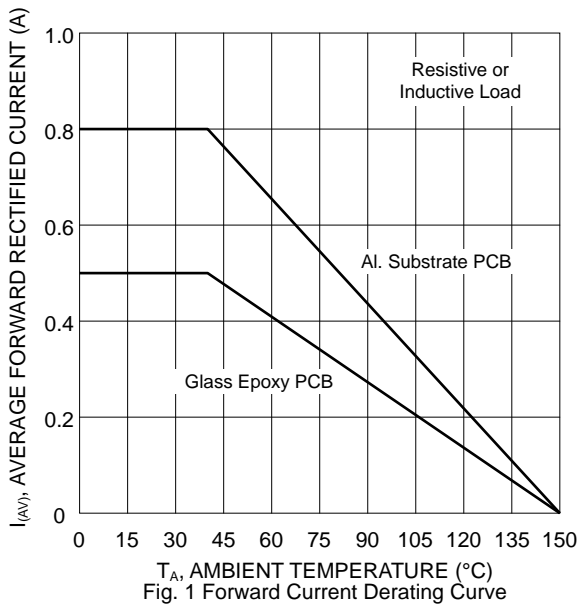
MB-S		
Dim	Min	Max
A	4.50	4.90
B	3.60	4.00
C	0.15	0.35
D	—	0.20
E	—	7.00
G	0.70	1.10
J	2.30	2.70
K	2.20	2.60
L	0.56	0.84
All Dimensions in mm		

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

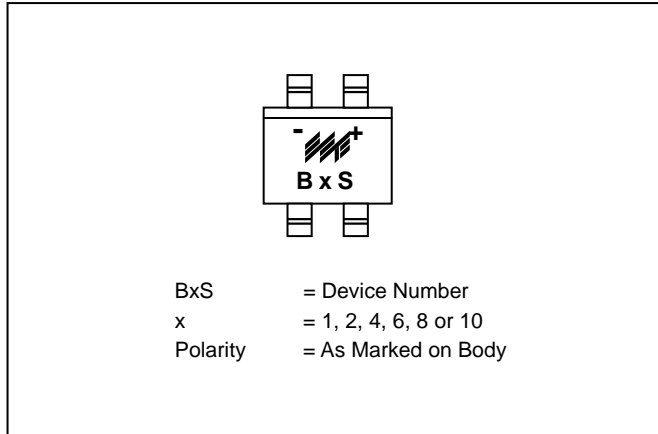
Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	B1S	B2S	B4S	B6S	B8S	B10S	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$							
Working Peak Reverse Voltage	$V_{RWM}$	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 40^\circ\text{C}$	$I_O$	0.8						A
Average Rectified Output Current (Note 2) @ $T_A = 40^\circ\text{C}$		0.5						
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 @ $I_F = 0.4\text{A}$ @ $I_F = 0.8\text{A}$	$V_{FM}$	1.0 1.1						V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0 500						$\mu\text{A}$
Typical Junction Capacitance per diode (Note 3)	$C_J$	13						pF
Thermal Resistance Junction to Ambient (Note 2)	$R_{JA}$	134						$^\circ\text{C/W}$
Thermal Resistance Junction to Ambient (Note 1)	$R_{JA}$	76						
Thermal Resistance Junction to Lead (Note 2)	$R_{JL}$	20						
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$

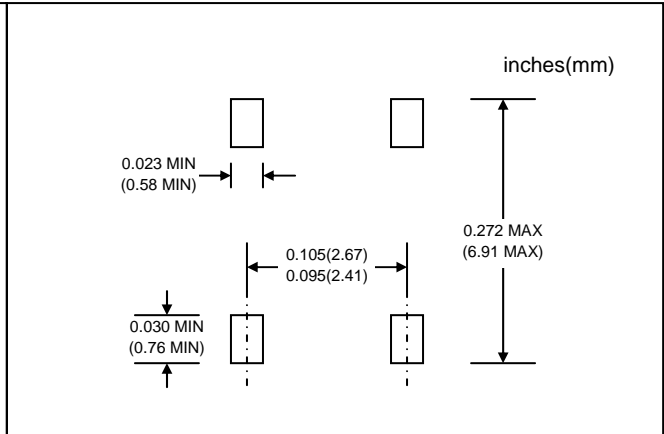
- Note: 1. Mounted on aluminum substrate PCB with 1.3 x 1.3mm pad areas.  
2. Mounted on glass epoxy PCB with 1.3 x 1.3mm pad areas.  
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



## MARKING INFORMATION

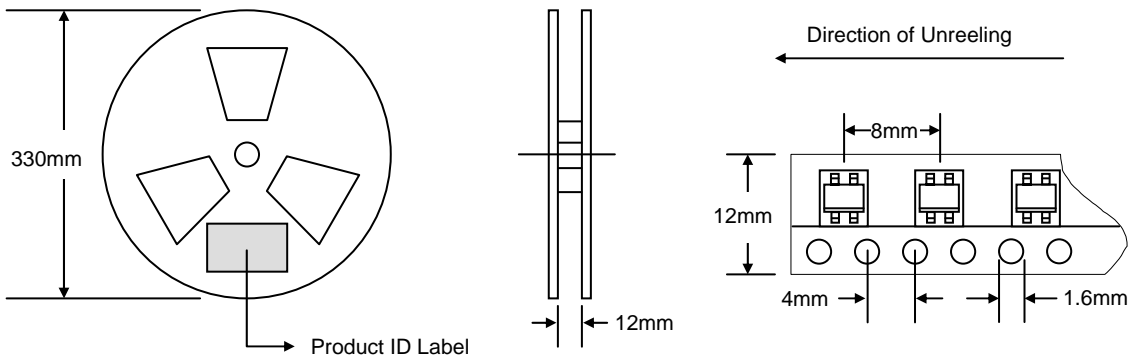


## RECOMMENDED FOOTPRINT



## 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.

## 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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**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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**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

*We power your everyday.*