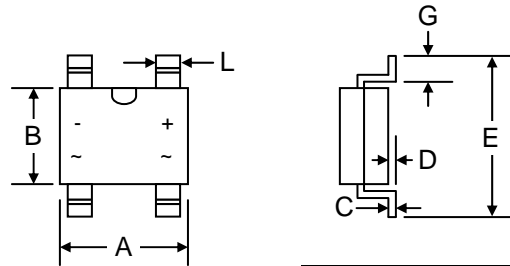


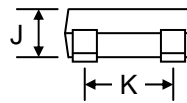
Features

- **Ultra-Slim 1.5mm Max. Case Height**
- Glass Passivated Die Construction
- High Reliability
- Low Forward Voltage Drop
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 94V-0



Mechanical Data

- Case: TB-S, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.10 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



TB-S		
Dim	Min	Max
A	4.80	5.20
B	4.20	4.60
C	0.10	0.30
D	0.05	0.15
E	6.00	6.40
G	0.30	0.80
J	1.30	1.50
K	3.80	4.20
L	0.60	0.70
All Dimensions in mm		

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	TB1S	TB2S	TB4S	TB6S	TB8S	TB10S	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{VRM}							
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 = 25°C	I _O	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30						A
Forward Voltage per diode @I _F = 0.4A @I _F = 1.0A	V _{FM}	0.95 1.1						V
Peak Reverse Current At Rated DC Blocking Voltage @T _A = 25°C @T _A = 125°C	I _{RM}	5.0 500						μA
Typical Junction Capacitance per leg (Note 2)	C _J	10						pF
Thermal Resistance Junction to Ambient (Note 1)	R _{JA}	62.5						°C/W
Thermal Resistance Junction to Lead (Note 3)	R _{JL}	25						
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. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Mounted on glass epoxy PCB with 1.3 x 1.3mm pad areas.

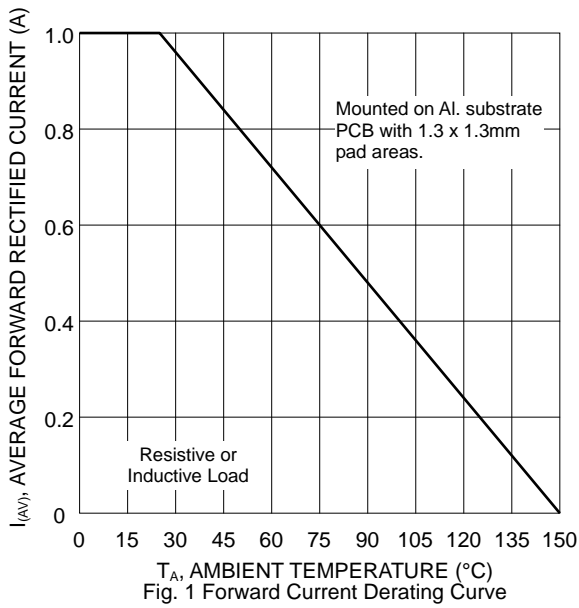


Fig. 1 Forward Current Derating Curve

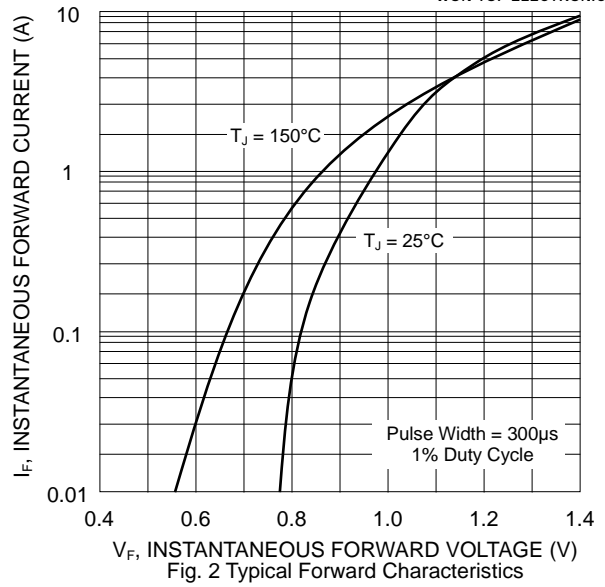


Fig. 2 Typical Forward Characteristics

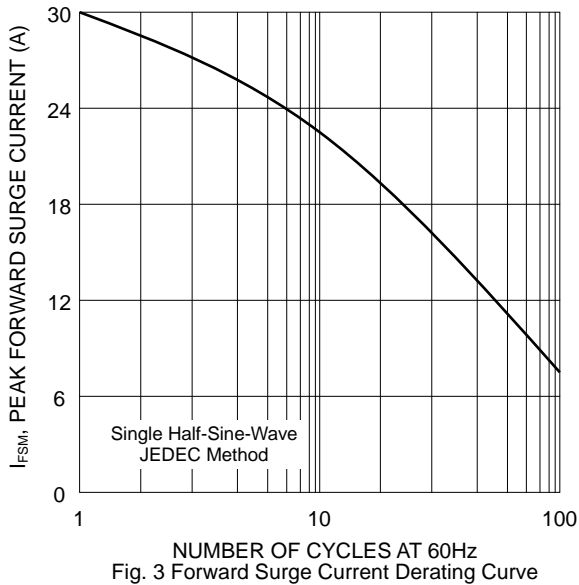


Fig. 3 Forward Surge Current Derating Curve

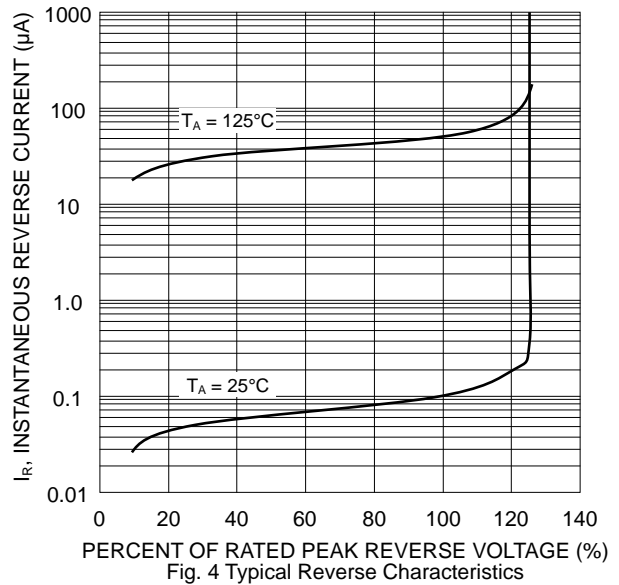


Fig. 4 Typical Reverse Characteristics

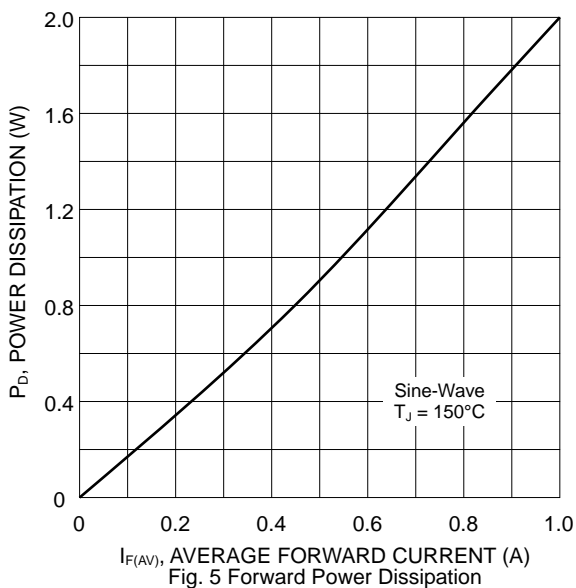


Fig. 5 Forward Power Dissipation

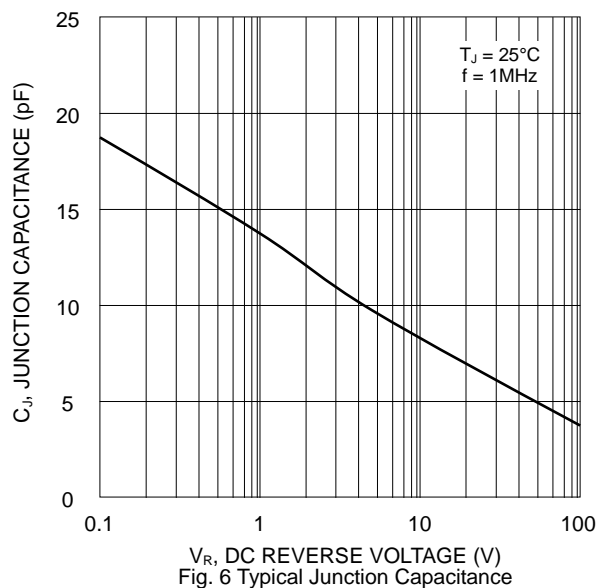
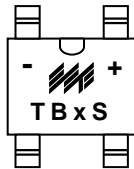


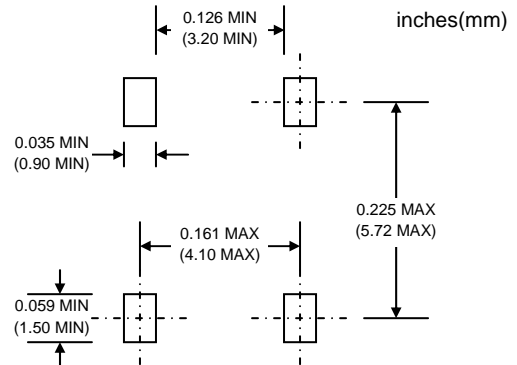
Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



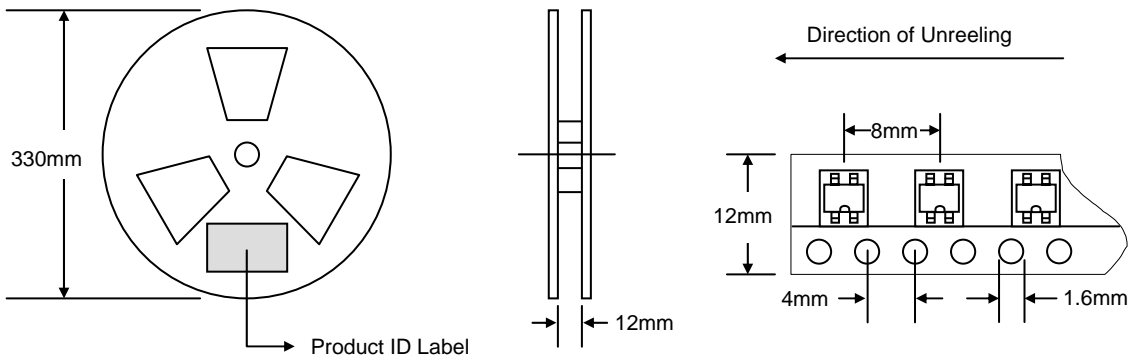
TBxS = Device Number
 x = 1, 2, 4, 6, 8 or 10
 Polarity = As Marked on Body

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	4,000	340 x 337 x 45	8,000	370 x 370 x 420	64,000	14.0

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
TB1S-T3	TB-S	4000/Tape & Reel
TB2S-T3	TB-S	4000/Tape & Reel
TB4S-T3	TB-S	4000/Tape & Reel
TB6S-T3	TB-S	4000/Tape & Reel
TB8S-T3	TB-S	4000/Tape & Reel
TB10S-T3	TB-S	4000/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, TB1S-T3-LF.**

WON-TOP ELECTRONICS and  are registered trademarks of Won-Top Electronics Co., Ltd (WTE). WTE has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

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.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: http://www.wontop.com

We power your everyday.