



## 8.0A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIER

## **Features**

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

# **Mechanical Data**

Case: TO-220A, Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

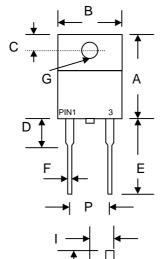
Polarity: See Diagram

Weight: 2.24 grams (approx.)

Mounting Position: Any

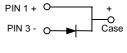
Mounting Torque: 11.5 cm-kg (10 in-lbs) Max.

Lead Free: For RoHS / Lead Free Version,
 Add "-LF" Suffix to Part Number, See Page 4





TO-220A				
Dim	Min	Max		
Α	13.90	15.90		
В	9.80	10.70		
С	2.54	3.43		
D	3.56	4.56		
Е	12.70	14.73		
F	0.51	0.96		
G	3.55 Ø	4.09 Ø		
Н	5.75	6.85		
I	4.16	5.00		
J	2.03	2.92		
K	0.30	0.65		
L	1.14	1.40		
Р	4.83	5.33		
All Dimensions in mm				



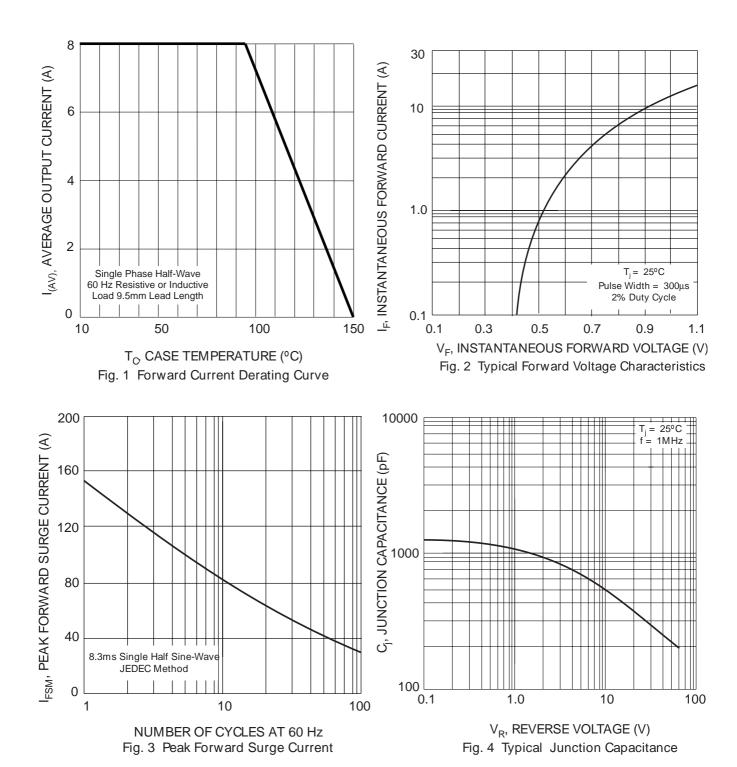
# Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	SB8150	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	150	V
RMS Reverse Voltage	VR(RMS)	105	V
Average Rectified Output Current @T <sub>C</sub> = 95°C	lo	8.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150	А
Forward Voltage @I <sub>F</sub> = 8.0A	VFM	0.92	V
	IRM	0.5 50	mA
Typical Junction Capacitance (Note 1)	Cj	700	pF
Typical Thermal Resistance (Note 2)	RθJC	3.0	°C/W
Operating and Storage Temperature Range	Tj, Tstg	-65 to +150	°C

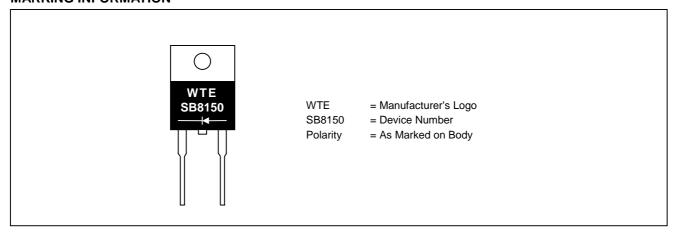
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to case mounted on heatsink.



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# **MARKING INFORMATION**



#### PACKAGING INFORMATION

## **BULK**

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
525 x 31 x 6	50	555 x 145 x 95	2,000	572 x 306 x 218	8,000	19.0

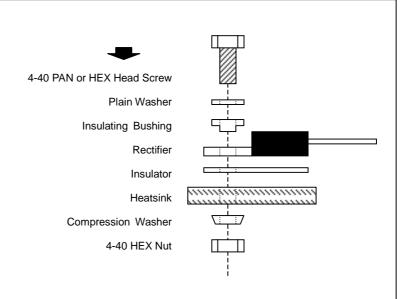
Note: 1. Anti-static tube, water clear color.

# RECOMMENDED SCREW MOUNTING ARRANGEMENT

Recommended isolated mounting when screw is at heatsink potential. 4-40 hardware is used.

Screw should not be tightened with any type of air-forced torque or equipment that may cause high impact on device package. The insulating bushing inside the mounting hole will insure the screw threads do not contact the metal base.

The interface should apply a layer of thermal grease or a highly conductive thermal pad for better heat dissipation.



SB8150 3 of 4 © 2006 Won-Top Electronics

## **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
SB8150	TO-220A	50 Units/Tube

- 1. Shipping quantity given is for minimum packing quantity only. For minimum
- order quantity, please consult the Sales Department.

  To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SB8150-LF. 2.

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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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