



# DATA SHEET

SEMICONDUCTOR

SB820CT~SB8100CT

## SCHOTTKY BARRIER RECTIFIERS



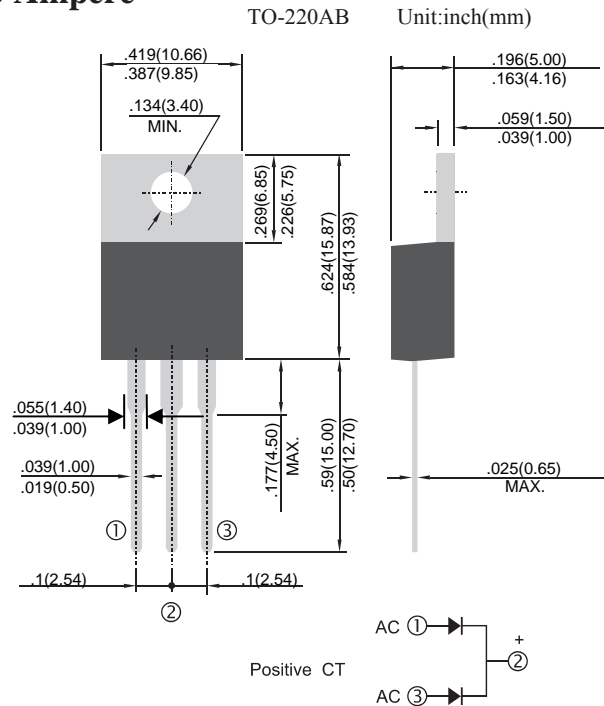
VOLTAGE 20 to 100 Volts CURRENT - 8.0 Ampere

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound. Exceeds environmental standards of MILS-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

### MECHANICAL DATA

- Case: TO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked.
- Mounting Position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

	SB820CT	SB830CT	SB840CT	SB850CT	SB860CT	SB880CT	SB8100CT	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at Tc=100°C	8							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Forward Voltage at 4.0A per element	0.55		0.75		0.85			V
Maximum DC Reverse Current at Tc=25°C	0.5							mA
DC Blocking Voltage per element Tc=100°C	50							
Typical Thermal Resistance Note RθJA	6.0							°C / W
Operating and Storage Temperature Range	-55 to +150							°C

NOTES:

1. Thermal Resistance Junction to Ambient .

# DEVICE CHARACTERISTICS

## SB820CT~SB8100CT

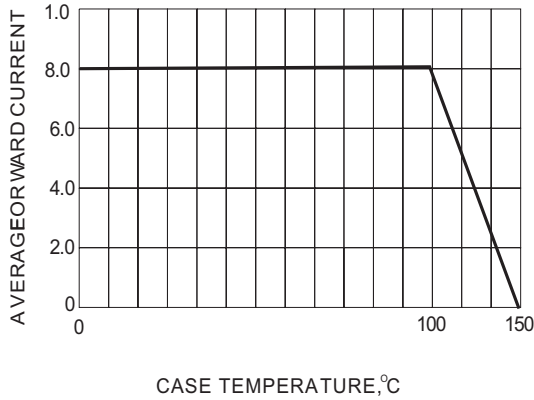


Fig.1-FORWARD CURRENT DERATING CURVE

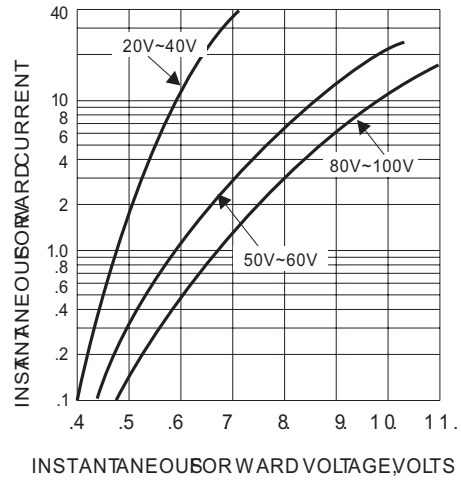


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

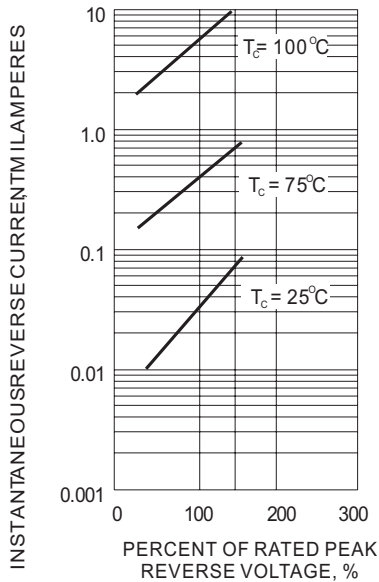


Fig.3-TYPICAL REVERSE CHARACTERISTICS

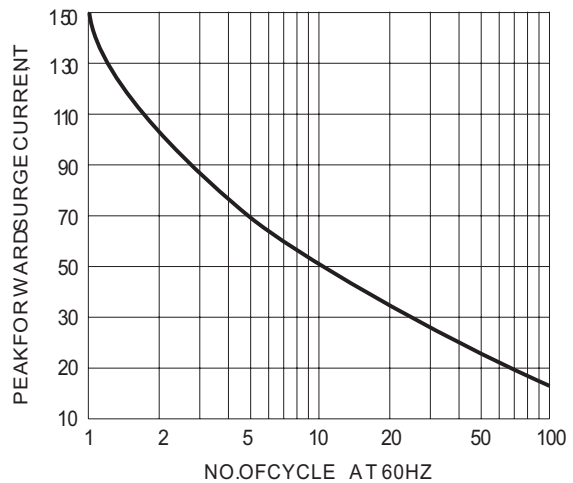


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

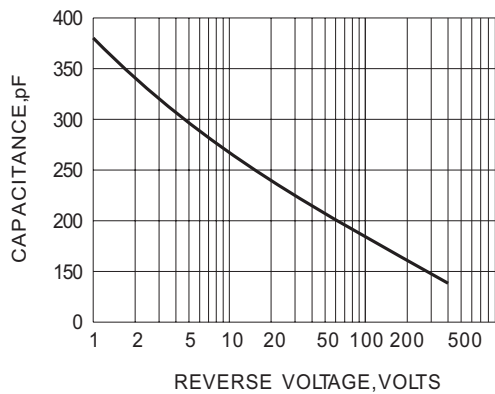


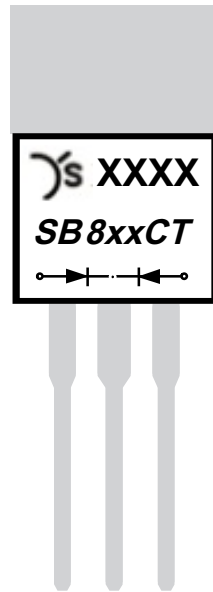
Fig.4-TYPICAL JUNCTION CAPACITANCE



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## Marking Information

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Line 1: YS Logo and Date code

The first half of Line 1: YS logo



The second half of Line 1:

YYWW: Year,

YYWW: Week.

Line 2 : Device name and Package type

SB : Schottky Barrier Rectifier


8xx : 8Ampere Series product.

8xx : The peak reverse Voltage of product.

Line 3 : Device Structure symbol



TO/ITO220 包装规范

Packing 包装	Dimension 尺寸	Qty 数量	Picture 图示
Bag/Tube 袋/管装	527mm*33mm*7mm	50 PCS	
Inner box 内盒	555mm*140mm*55mm	2000 PCS	 <p>标签贴盒盖正面中心处</p>
Carton 外箱	575mm*285mm *155mm	8000 PCS	 <p>外箱两侧贴标签位置</p>