



# DATA SHEET

## SB620~SB660

### SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts CURRENT - 6 Ampere

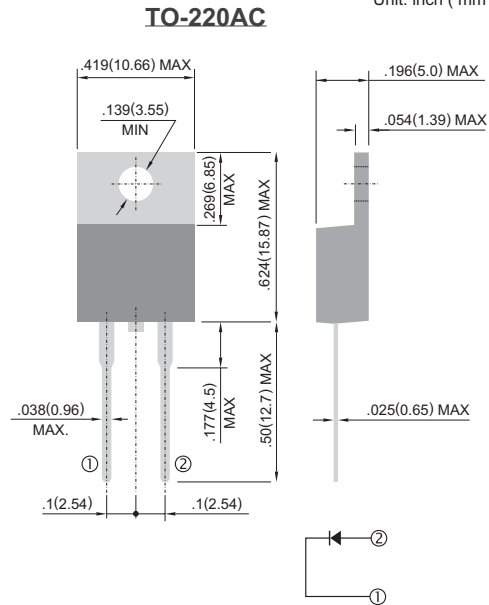
Unit: inch ( mm )

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-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.

#### MECHANICAL DATA

Case: TO-220AC full molded plastic package  
 Terminals: Lead solderable per MIL-STD-202, Method 208  
 Polarity: As marked.  
 Mounting Position: Any  
 Weight: 0.08 ounces, 2.24grams.



#### 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%

	SB620	SB630	SB640	SB650	SB660	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	V
Maximum RMS Voltage	14	21	28	35	42	V
Maximum DC Blocking Voltage	20	30	40	50	60	V
Maximum Average Forward Rectified Current at Tc=75°C	6					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	75					A
Maximum Forward Voltage at 6.0A per element	0.55		0.70			V
Maximum DC Reverse Current at Tc=25°C	0.1					mA
DC Blocking Voltage per element Tc=100°C	15					
Typical Thermal Resistance Note RθJC	6.0					°C/W
RθJA	80					
Operating and Storage Temperature Range	-50 to +125					°C
Storage Temperature Range	-50 to +150					°C

#### NOTES:

1. Thermal Resistance Junction to Ambient .



### RATING AND CHARACTERISTIC CURVES

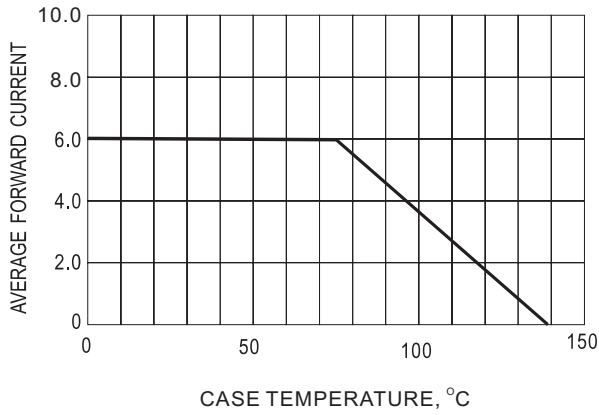


Fig.1- FORWARD CURRENT DERATING CURVE

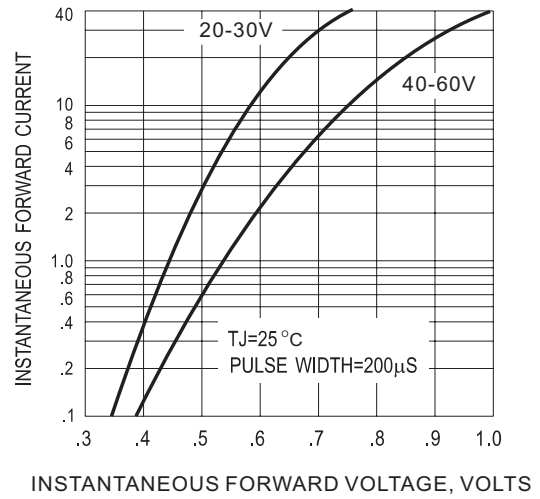


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

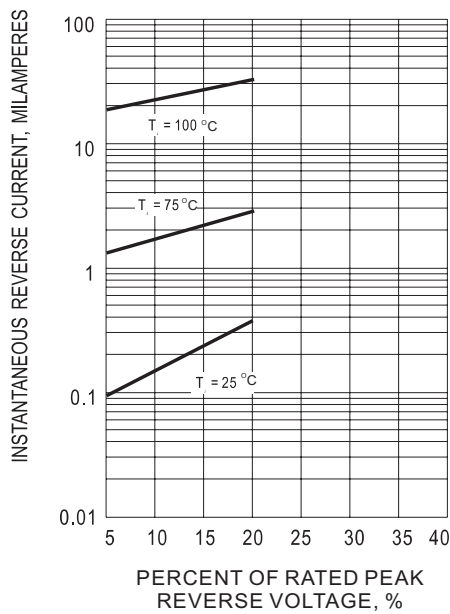


Fig.3- TYPICAL REVERSE CHARACTERISTIC

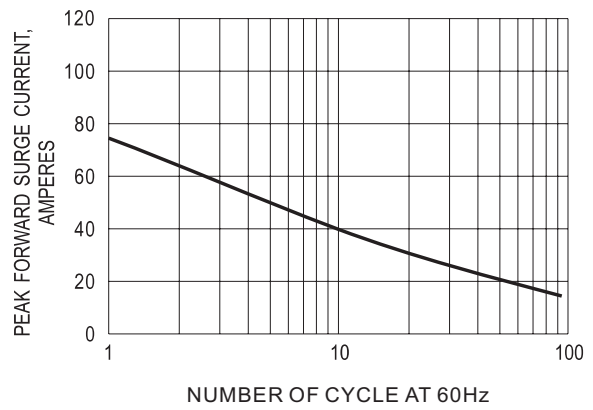


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

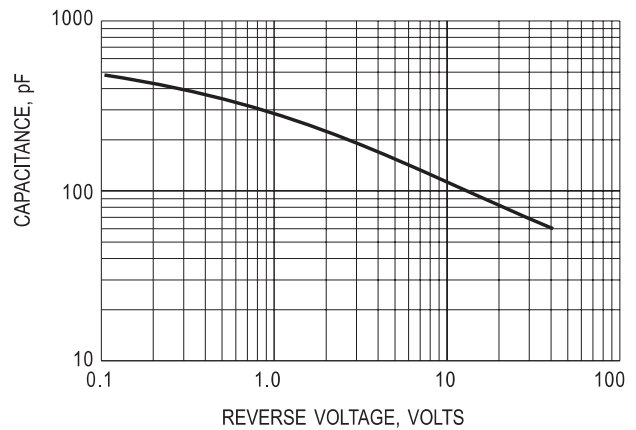


Fig.5- TYPICAL JUNCTION CAPACITANCE