

# SB1620CT THRU SB16100CT

## 16 AMPERE SCHOTTKY BARRIER RECTIFIERS VOLTAGE - 20 to 100 Volts CURRENT - 16.0 Amperes

### 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-220AB molded plastic

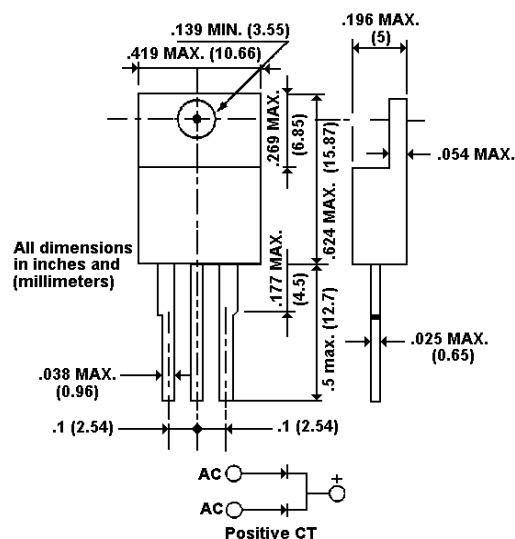
Terminals: Lead, solderable per MIL-STD-202, Method 208

Polarity: As marked

Mounting Position: Any

Weight: 0.08 ounces, 2.24 grams

### TO-220AB



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half wave 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SB1620CT	SB1630CT	SB1640CT	SB1650CT	SB1660CT	SB1680CT	SB16100CT	UNIT
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	26	35	42	56	80	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at $T_C=90$ °C	16.0							A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load(JEDEC method)	150							A
Maximum Forward Voltage at 8.0A per element	0.55		0.75		0.85			V
Maximum DC Reverse Current at Rated $T_C=25$ °C	0.5							mA
DC Blocking Voltage per element $T_C=100$ °C	100							
Typical Thermal Resistance Note R $\theta_{KJA}$	60							°C/W
Operating and Storage Temperature Range $T_J$	-50 TO +125							°C

### NOTES:

Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES  
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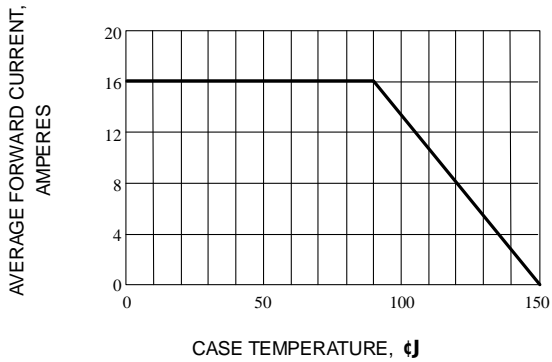


Fig. 1-FORWARD CURRENT DERATING CURVE

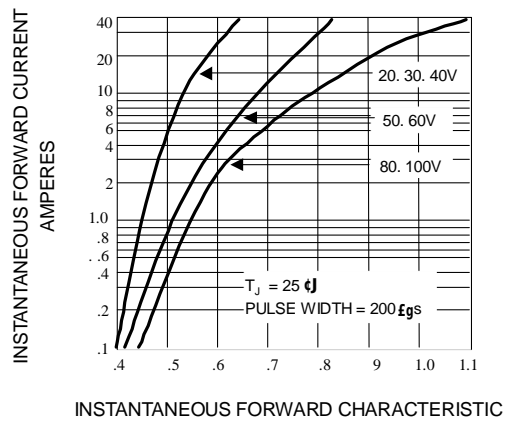


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

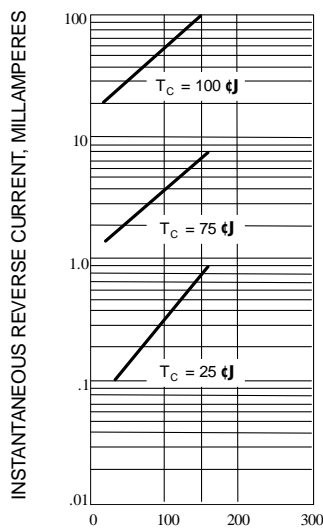


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

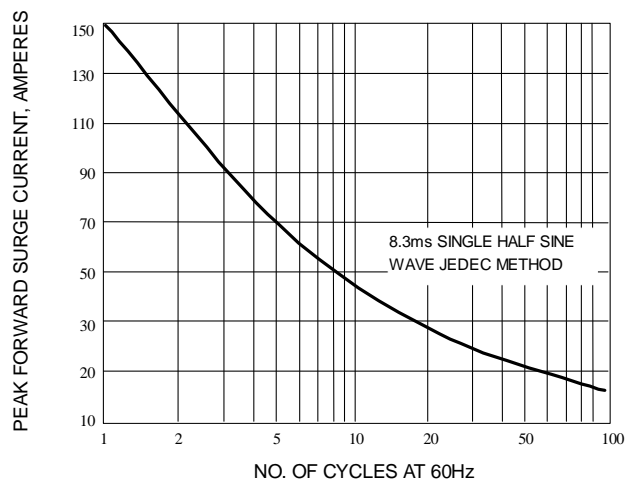


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

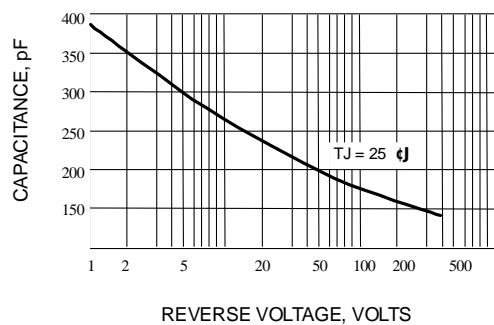


Fig. 5-TYPICAL JUNCTION CAPACITANCE