SB1620 THRU SB16100

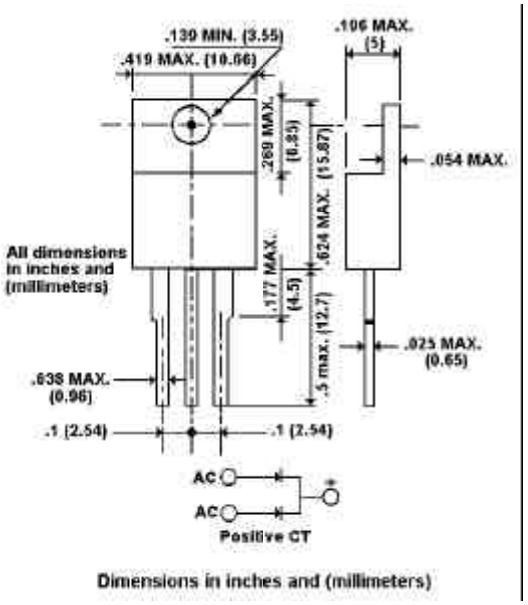
16 AMPERE SCHOTTKY BARRIER RECTIFIERS

VOLTAGE - 20 to 100 Volts CURRENT - 16.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammab ity Classification 94V-O ut izing
- Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency
- Low forward voltage, high current capab ity
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection app cations

TO-220AB



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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	SB1620	SB1630	SB1640	SB1650	SB1660	SB1680	SB16100	UNITS
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 ¢J	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 ¢J DC Blocking Voltage per element T_C=100 ¢J	0.5 100							mA
Typical Thermal Resistance Note R £KJA	60							¢J/W
Operating and Storage Temperature Range T_J	-50 TO +125							¢J

NOTES:

Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES

SB1620 THRU SB16100

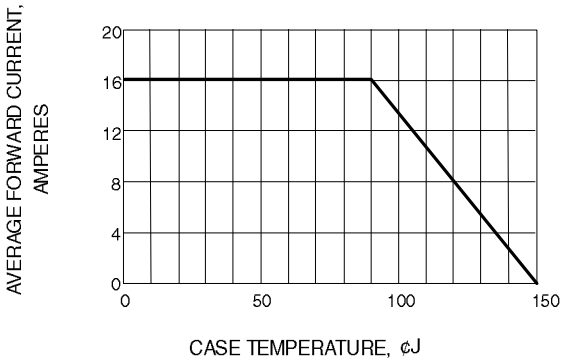


Fig. 1-FORWARD CURRENT DERATING CURVE

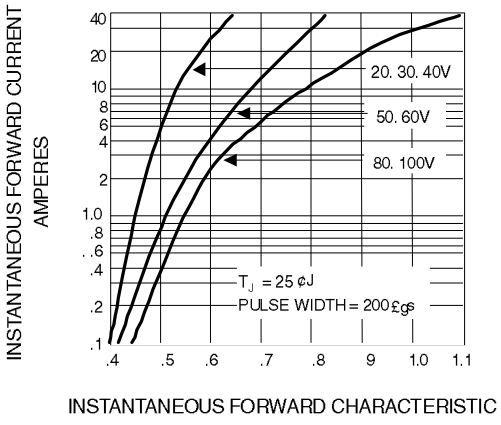


Fig. 2-TYPICAL INSTNATANEOUS FORWARD CHARACTERISTIC

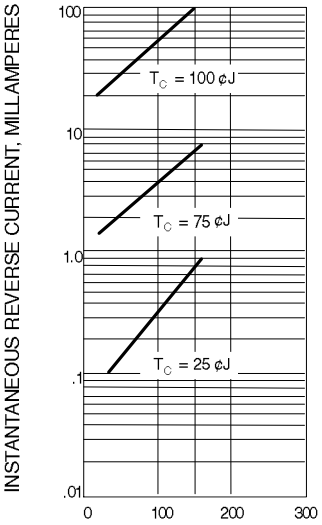


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

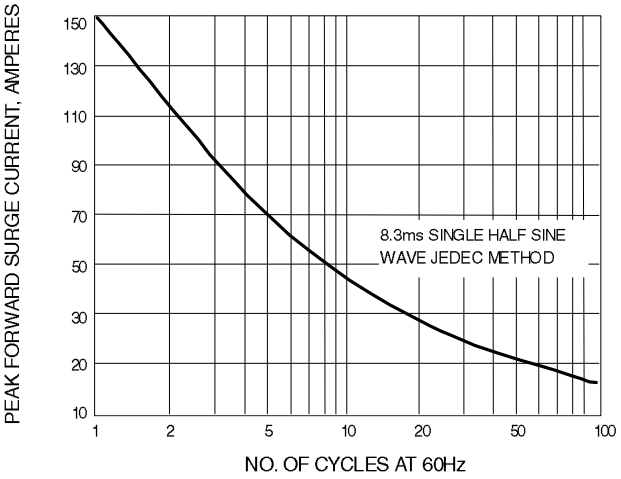


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

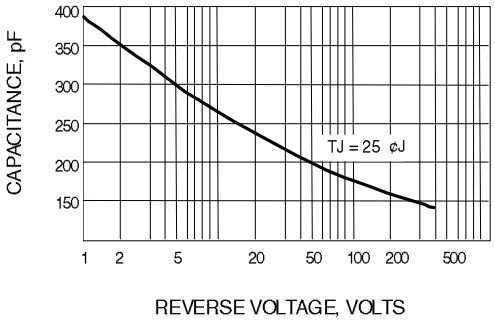


Fig. 5-TYPICAL JUNCTION CAPACITANCE