DATA SHEET

SB3020CT~SB3060CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE- 20 to 60 Volts CURRENT - 30.0 Ampere

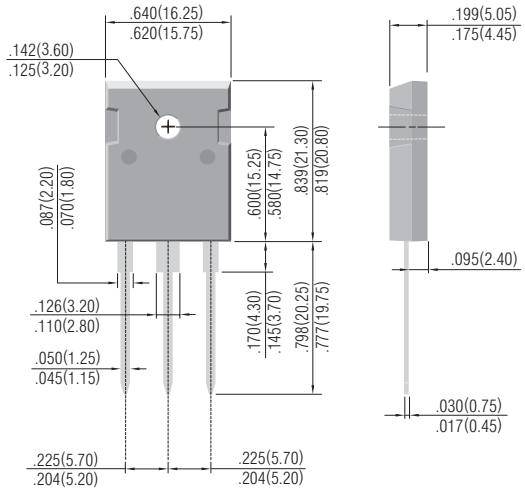
Reconfgnized File #E228882

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarlity protection applications.

Unit: inch (mm)

TO-3P



MECHANICAL DATA

Case: TO-3P Molded plastic

Terminals: Solder plated, solderable per MIL-STD-202, Method 208

Polarity: As marked.

Standard packaging: Any

Weight: 0.2 ounces, 5.6grams.

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%

	SYMBOLS	SB3020CT	SB3030CT	SB3040CT	SB3050CT	SB3060CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20.0	30.0	40.0	50.0	60.0	V
Maximum RMS Voltage	V_{RMS}	14.0	21.0	28.0	35.0	42.0	V
Maximum DC Blocking Voltage	V_{DC}	20.0	30.0	40.0	50.0	60.0	V
Maximum Average Forward Rectified Current at Tc=90°C	I(AV)	30					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	275					A
Maximum Instantaneous Forward Voltage at 15.0A per element	V_F	0.55		0.75			V
Maximum DC Reverse Current (Note 1) Ta=25°C at Rated DC Blocking Voltage Ta=100°C	I_R	0.5 75.0					mA
Typical Thermal Resistance Note	RθJC	1.5					°C/W
Operating and Storage Temperature Range T_J	T_J	-50 to +125					°C

NOTES:

1. Thermal Resistance Junction to Ambient .

RATING AND CHARACTERISTIC CURVES

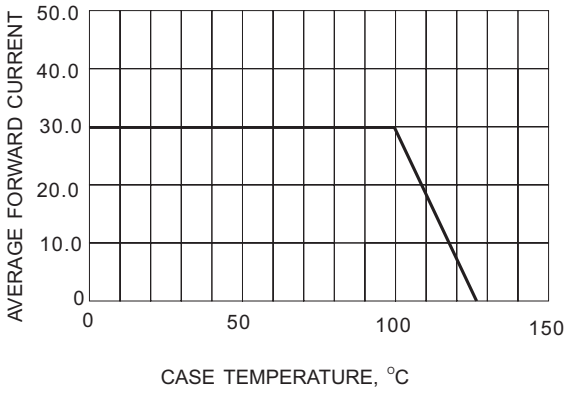


Fig.1- FORWARD CURRENT DERATING CURVE

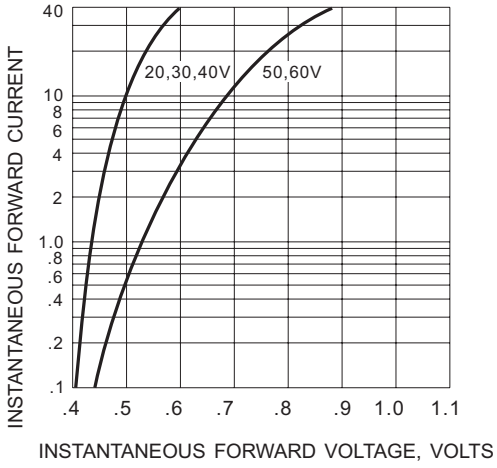


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

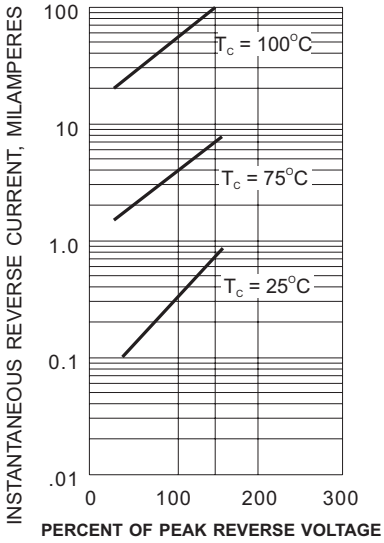


Fig.3- TYPICAL REVERSE CHARACTERISTIC

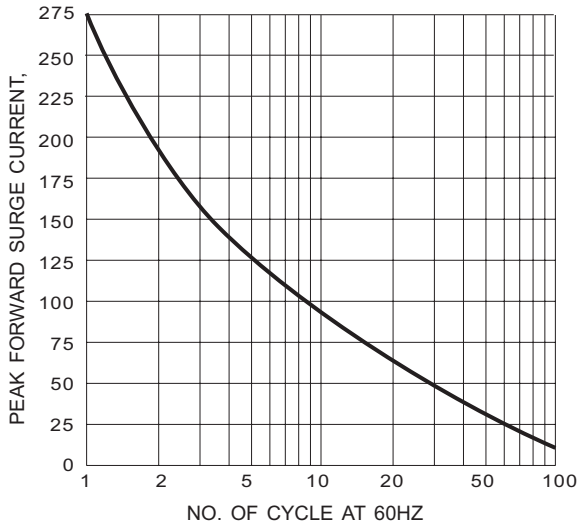


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

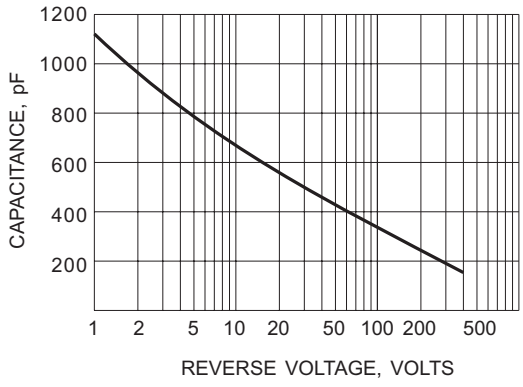


Fig.5- TYPICAL JUNCTION CAPACITANCE