



DATA SHEET

SB3020PT~SB3060PT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 30.0 Amperes

TO-3P

Unit: inch (mm)

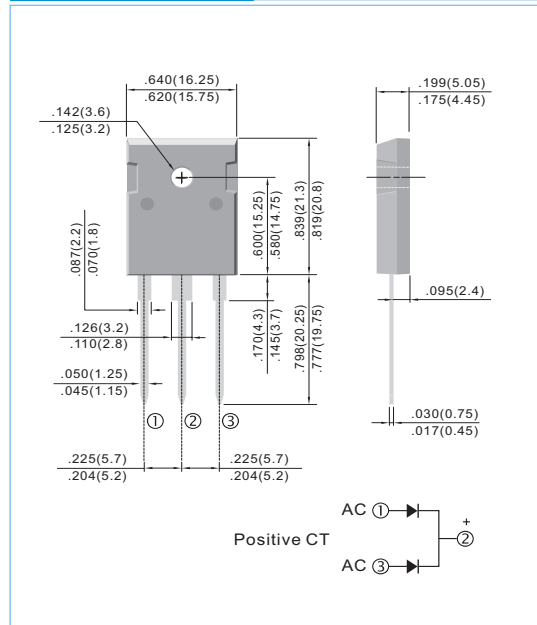
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FEATURES

- 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 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-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%

PARAMETER	SYMBOL	SB3020PT	SB3030PT	SB3040PT	SB3050PT	SB3060PT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Current .375"(9.5mm) lead length at T _c =90 °C	I _{AV}	30.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	275					A
Maximum Forward Voltage at 15.0A per leg	V _F	0.55			0.70		V
Maximum DC Reverse Current at Rated DC Blocking Voltage TA=25 °C Maximum DC Reverse Current at Rated DC Blocking Voltage TA=100 °C	I _R	1.0			100		mA
Typical Thermal Resistance	R _{θJC}	1.5					°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-50 TO +125					°C



RATING AND CHARACTERISTIC CURVES

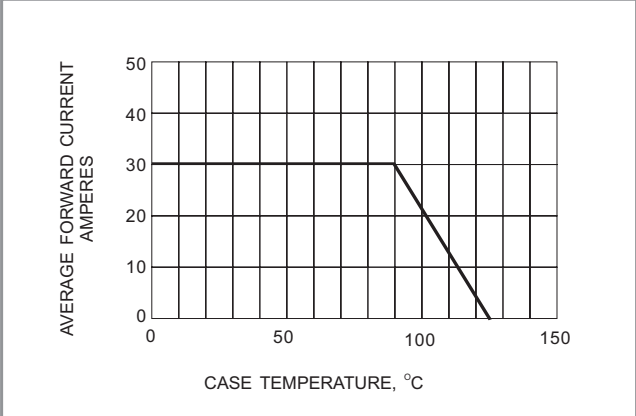


Fig.1- FORWARD CURRENT DERATING CURVE

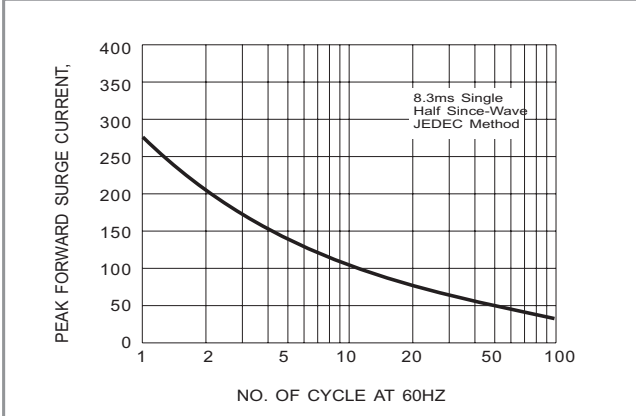


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

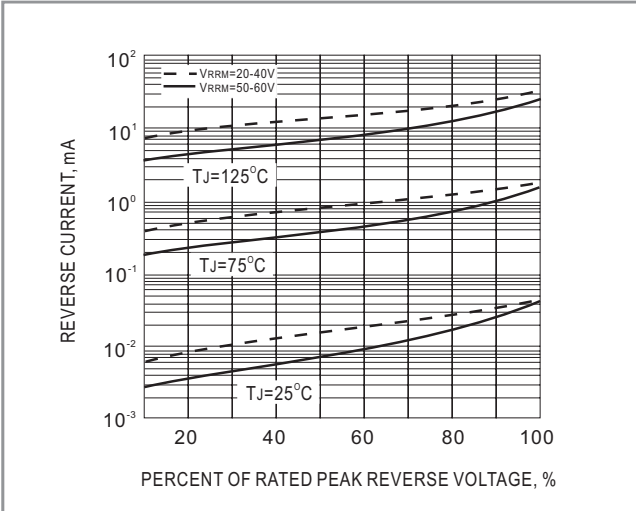


Fig.3- TYPICAL REVERSE CHARACTERISTICS

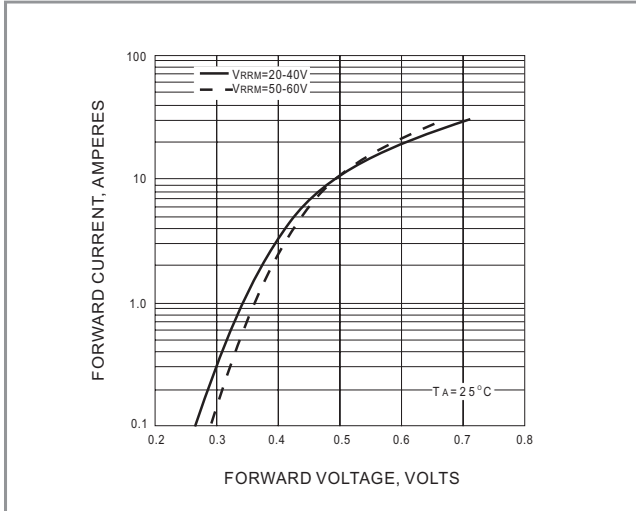


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS