



DATA SHEET

SB620CT~SB660CT

SCHOTTKY BARRIER RECTIFIERS

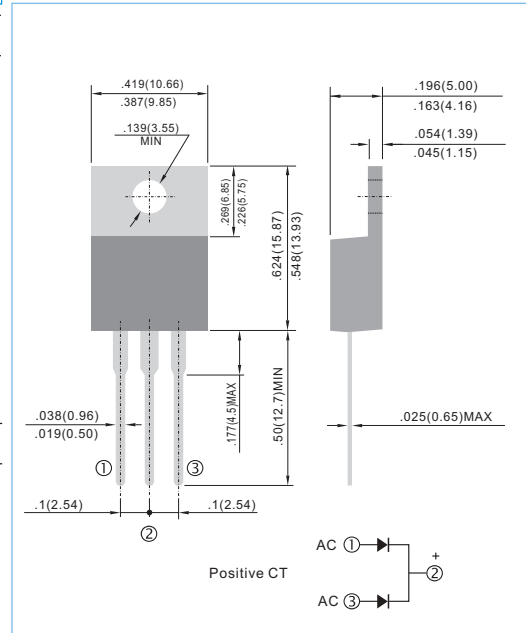
VOLTAGE 20 to 60 Volts **CURRENT** 6.0 Amperes **TO-220AB** Unit : inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 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.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: TO-220AB 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 RATING 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	SB 620CT	SB 630CT	SB 640CT	SB 650CT	SB 660CT	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 $T_c = 75^\circ C$	I_{AV}	6.0					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	75					A
Maximum Forward Voltage at 3.0A	V_F	0.55			0.70		V
Maximum DC Reverse Current $T_c = 25^\circ C$ at Rated DC Blocking Voltage $T_c = 100^\circ C$	I_R	0.2			15		mA
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	6			80		$^\circ C / W$
Operating Junction Temperature Range	T_J	-50 to +125					$^\circ C$
Storage Temperature Range	T_J, T_{STG}	-50 to +150					$^\circ C$

NOTES:

Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

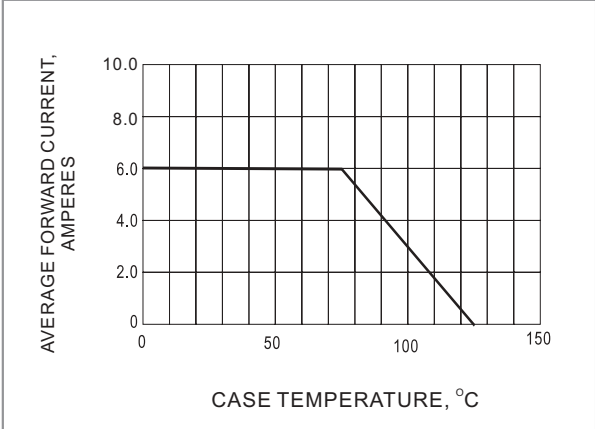


Fig. 1- FORWARD CURRENT DERATING CURVE

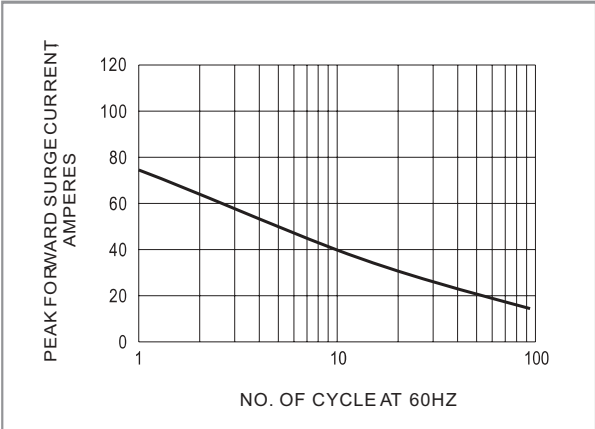


Fig. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT

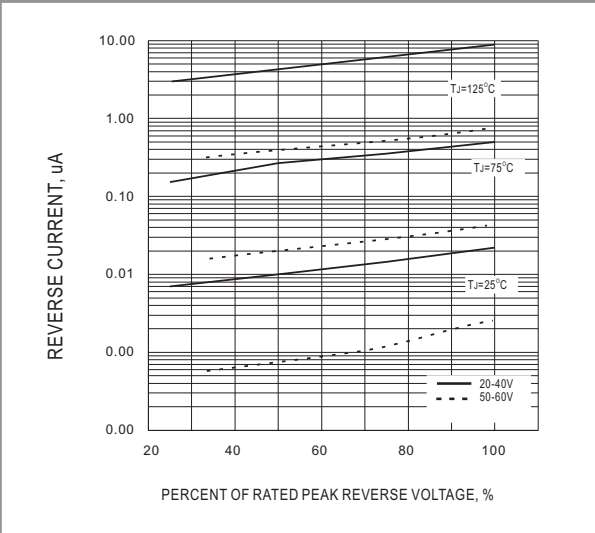


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

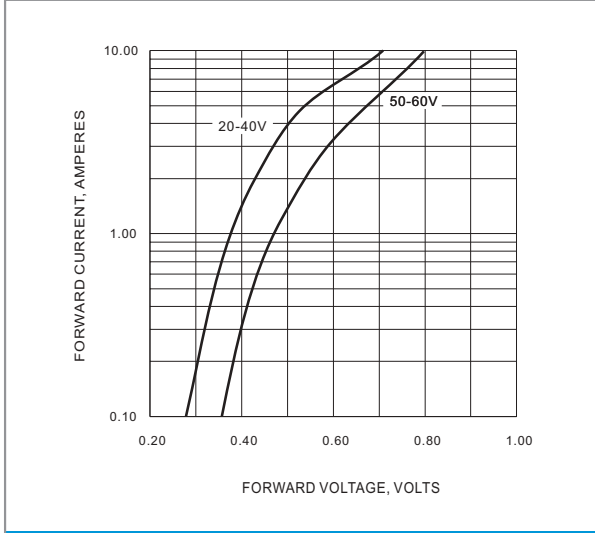


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC