



# DATA SHEET

## SB620FCT~SB660FCT

### ISOLATION SCHOTTKY BARRIER RECTIFIERS

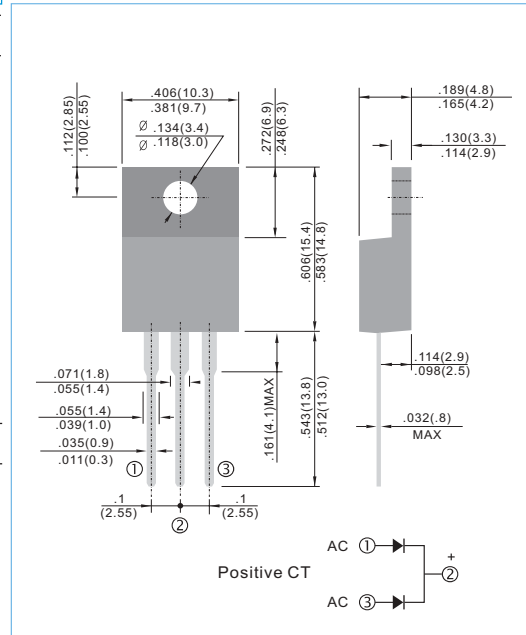
**VOLTAGE** 20 to 60 Volts **CURRENT** 6.0 Amperes **ITO-220AB** Unit : inch (mm)

#### 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.
- Both normal and Pb free product are available :  
Normal : 80~95% Sn, 5~20% Pb  
Pb free: 98.5% Sn above

#### MECHANICAL DATA

Case: ITO-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%

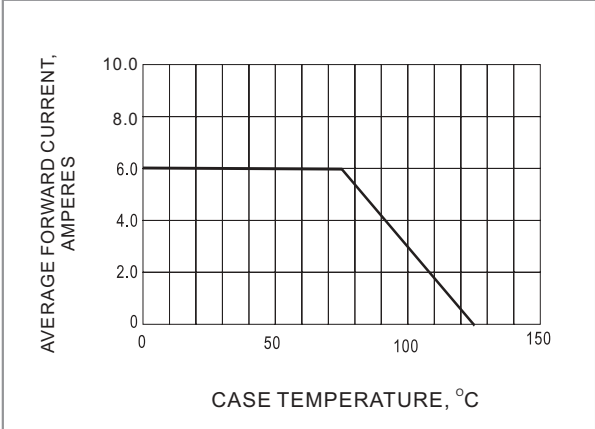
PARAMETER	SYMBOL	SB620FCT	SB630FCT	SB640FCT	SB650FCT	SB660FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_c = 75^\circ C$	$I_{AV}$	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:

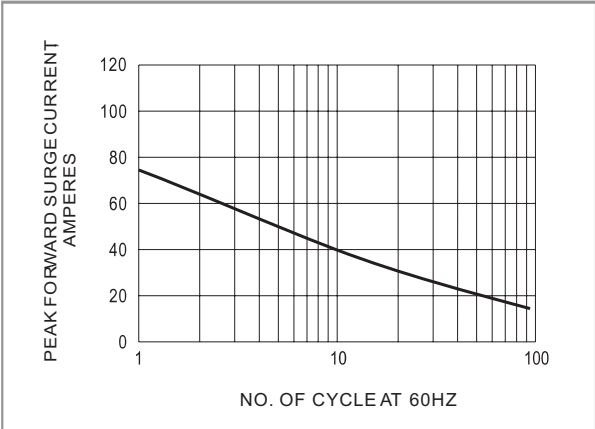
Both Bonding and Chip structure are available.



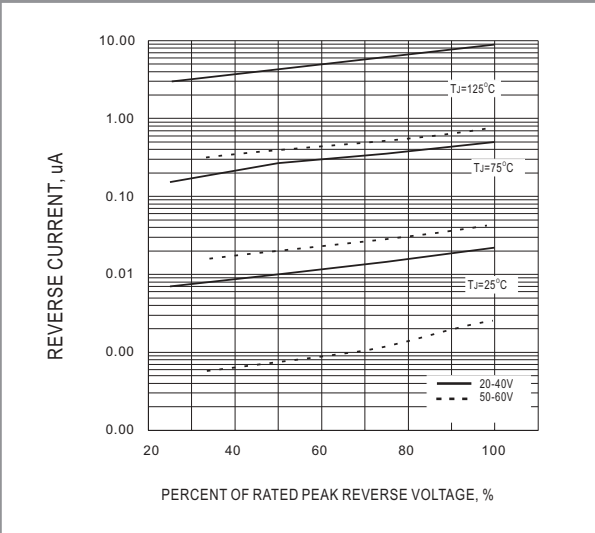
**RATING AND CHARACTERISTIC CURVES**



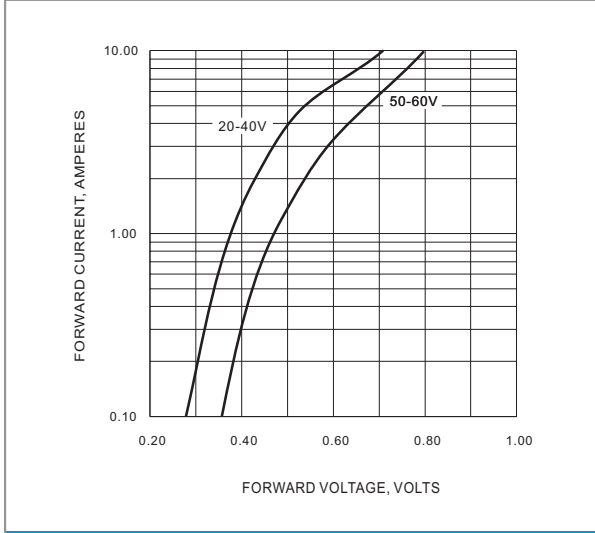
**Fig. 1- FORWARD CURRENT DERATING CURVE**



**Fig. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig. 3- TYPICAL REVERSE CHARACTERISTIC**



**Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**