



SB1020FCT~SB1060FCT

ISOLATION SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 10 Amperes

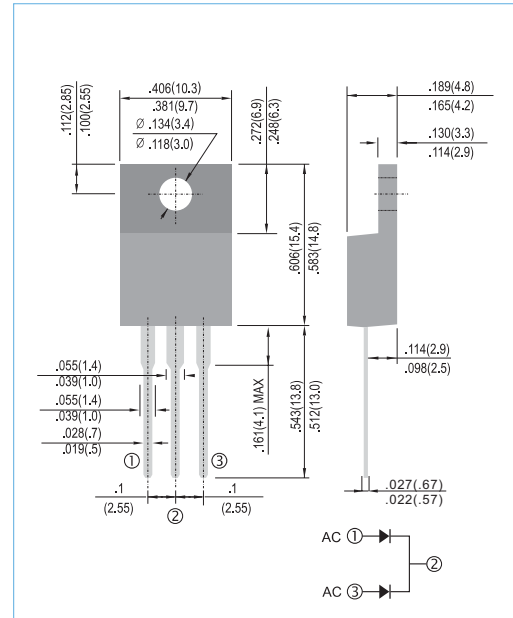
ITO-220AB Unit: inch (mm)

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.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: ITO-220AB Full Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.055 ounces, 1.5615 grams.



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	SB1020FCT	SB1030FCT	SB1040FCT	SB1045FCT	SB1050FCT	SB1060FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31.5	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	V
Maximum Average Forward Current at $T_C = 75^\circ C$	$I_{F(AV)}$	10						A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150						A
Maximum Forward Voltage at 5A,	V_F	0.55				0.75		V
Maximum DC Reverse Current at $T_J=25^\circ C$ Rated DC Blocking Voltage $T_J=100^\circ C$	I_R	0.2 50			0.1 50			mA
Typical Thermal Resistance	$R_{\theta JC}$	3.0						$^\circ C / W$
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150			$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150						$^\circ C$

NOTES:
Both Bonding and Chip structure are available.



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RATING AND CHARACTERISTIC CURVES

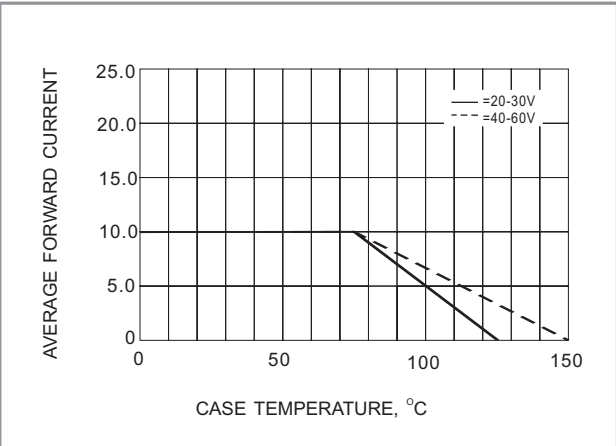


Fig. 1- FORWARD CURRENT DERATING CURVE

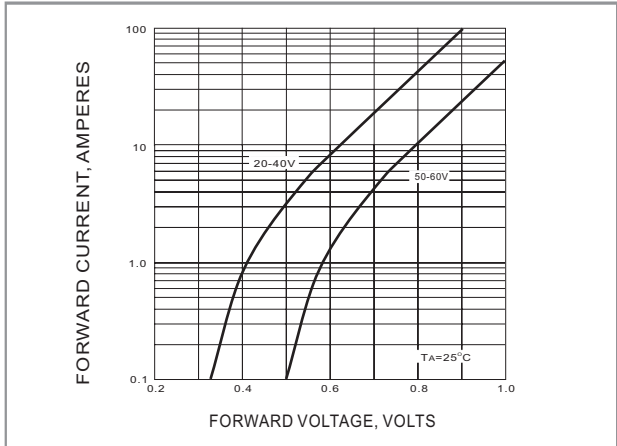


Fig. 2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

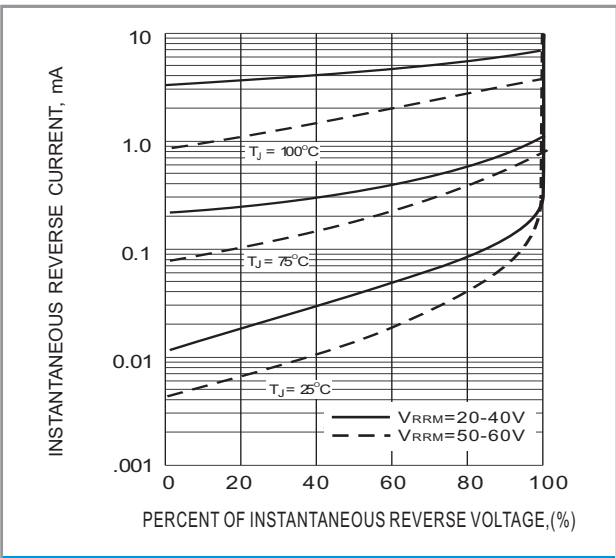


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

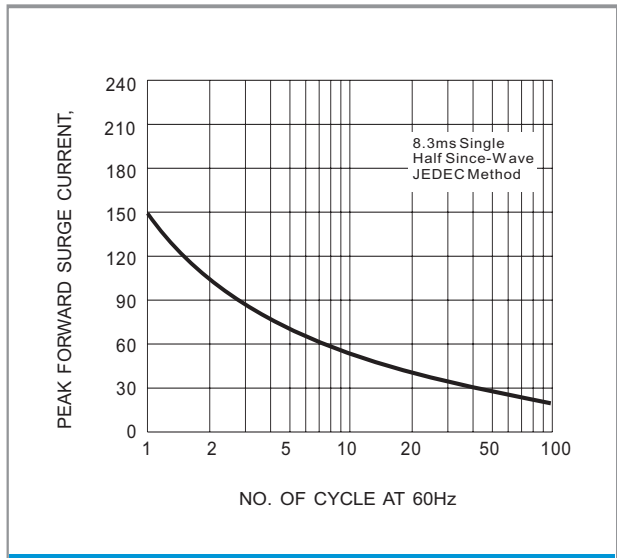


Fig. 4- MAXIMUM NON-REPETITIVE SURGE CURRENT