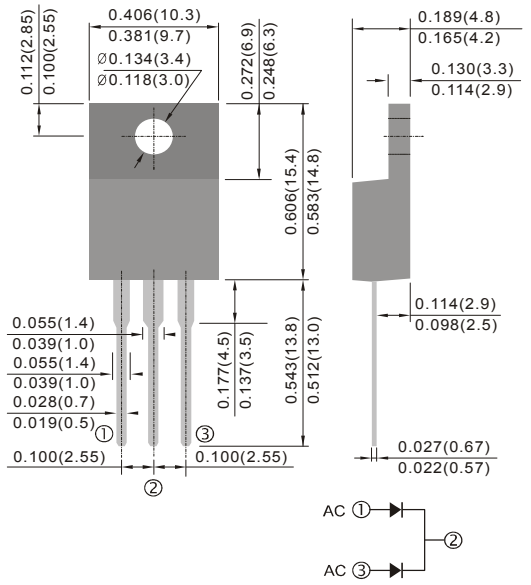
PANJIT SEMI CONDUCTOR

SB2020FCT SERIES

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 20 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 polarlity protection applications.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANCAL 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	SB2020FCT	SB2030FCT	SB2040FCT	SB2045FCT	SB2050FCT	SB2060FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	V
Maximum Average Forward Current at Tc =75 °C	$I_{F(AV)}$	20.0						A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200						A
Maximum Forward Voltage at 10A per leg	V_F	0.55				0.75		V
Maximum DC Reverse Current at T_J=25 °C Rated DC Blocking Voltage T_J=100°C	I_R	0.2 50						mA
Typical Thermal Resistance per diode	$R_{\theta JC}$	2						°C / W
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150				°C
Storage Temperature Range	T_{STG}	-55 to +150						°C

Note:

Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

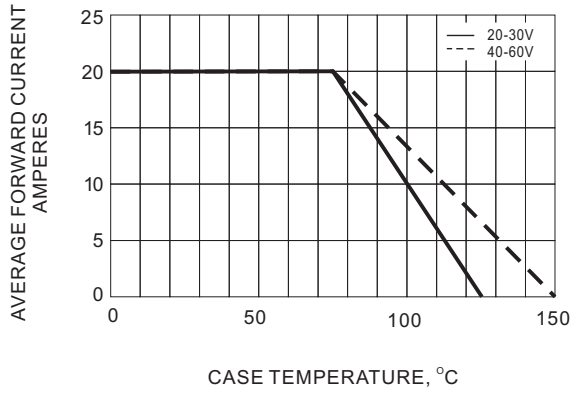

Fig.1- FORWARD CURRENT DERATING CURVE

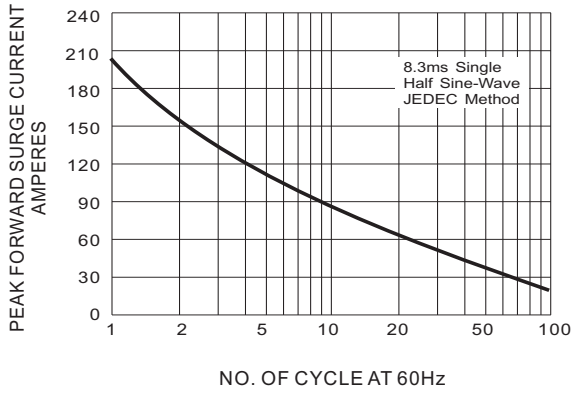

Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

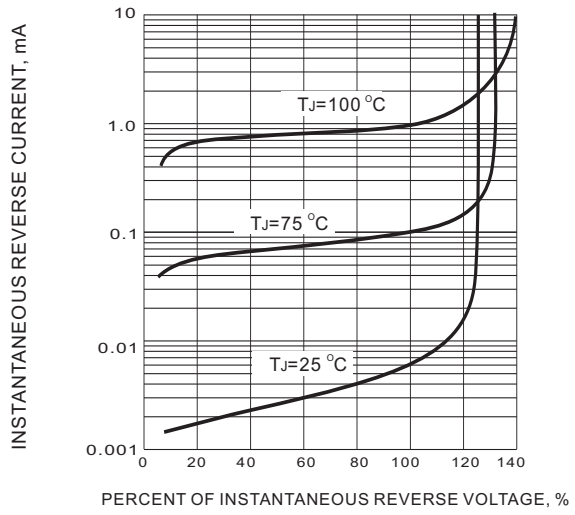

Fig.3- TYPICAL REVERSE CHARACTERISTIC

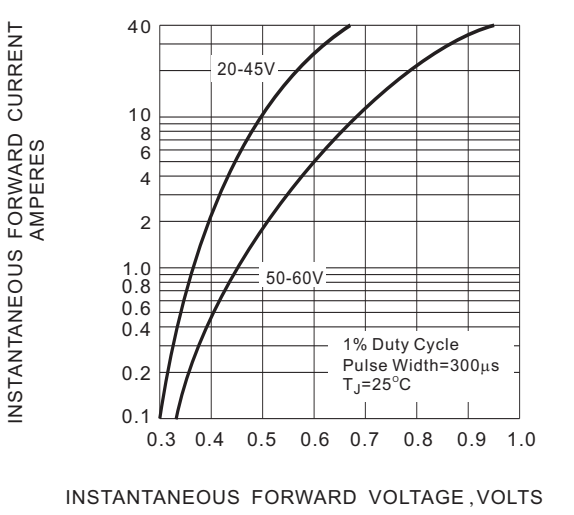

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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