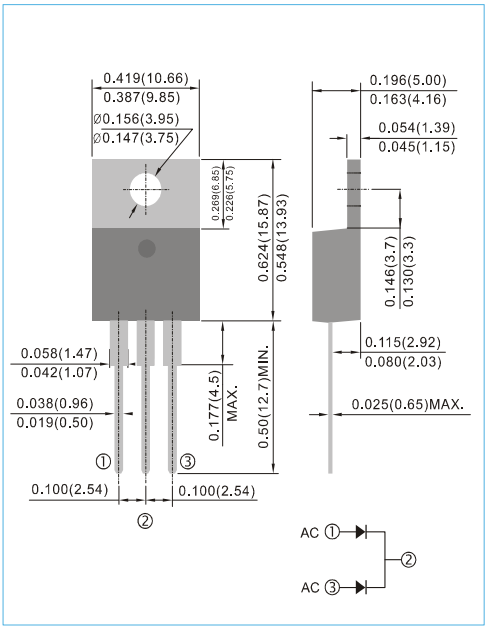
PANJIT SEMI CONDUCTOR

SB2020CT SERIES

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volt **CURRENT** 20 Ampere

TO-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 compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANCAL DATA

- Case: TO-220AB Molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.065 ounces, 1.859grams.

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	SB2020CT	SB2030CT	SB2040CT	SB2045CT	SB2050CT	SB2060CT	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 T_C =75°C	$I_{F(AV)}$	20						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200						A
Maximum Forward Voltage at 10A per leg	V_F	0.55				0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25 °C / T_J=100°C	I_R	0.2 / 50						mA
Typical Thermal Resistance	$R_{\theta JC}$	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.

SB2020CT SERIES

RATING AND CHARACTERISTIC CURVES

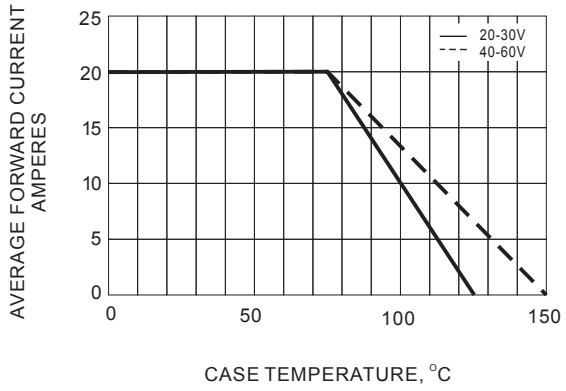


Fig.1- FORWARD CURRENT DERATING CURVE

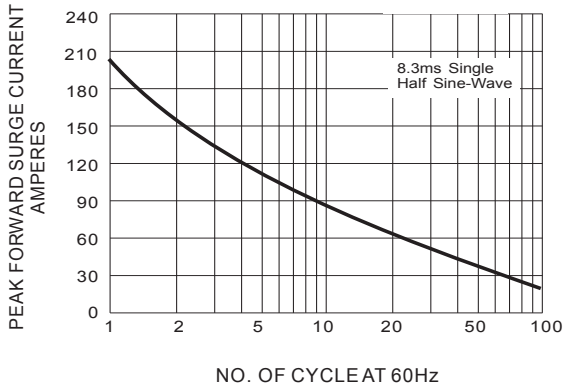


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

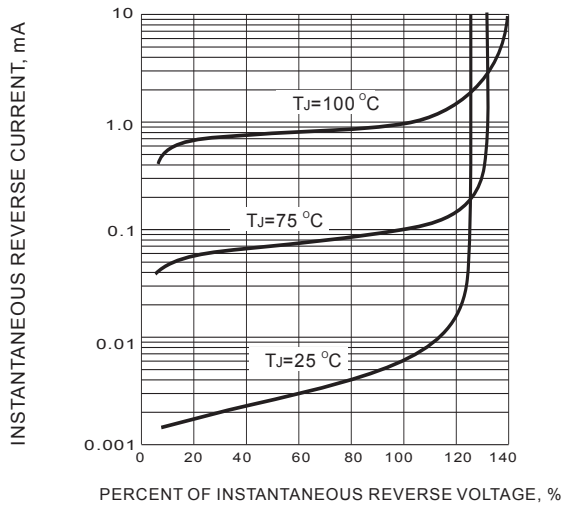


Fig.3- TYPICAL REVERSE CHARACTERISTIC

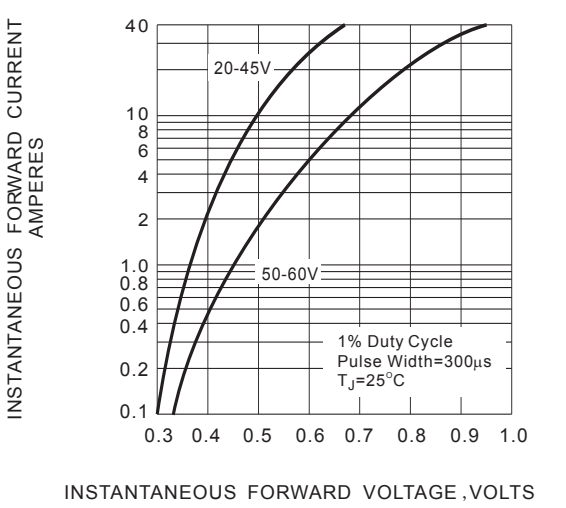


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

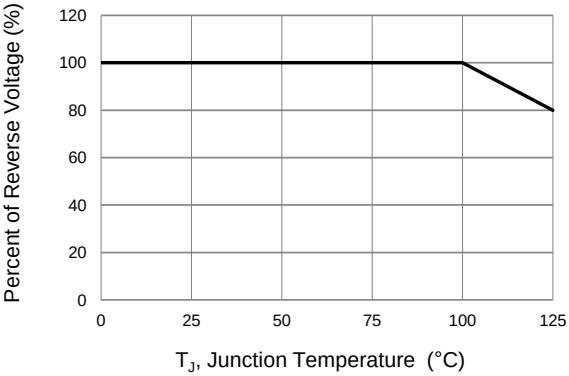


Fig.5- OPERATING TEMPERATURE DERATING CURVE

SB2020CT SERIES

Part No_packing code_Version

SB2020CT_T0_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

SB2020CT SERIES

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