



SCHOTTKY BARRIER RECTIFIERS

VOLTAGE20 to 60 VoltCURRENT10 Ampere

FEATURES

 Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
 Flame Retardant Epoxy Molding Compound.

- 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

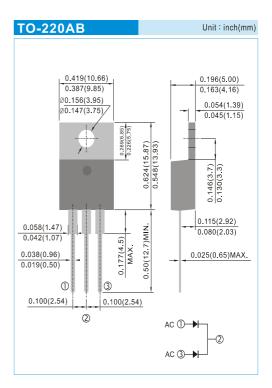
MECHANCAL DATA

• Case: TO-220AB Molded plastic

• Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marked.Standard packaging: Any

• Weight: 0.067 ounces, 1.89 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	SB1020CT	SB1030CT	SB1040CT	SB1045CT	SB1050CT	SB1060CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	45	50	60	٧
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 0.375"(9.5mm) lead length at T _c =100°C	I _{F(AV)}	10						
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150						
Maximum Forward Voltage at 5A per leg	V _F	0.55 0.75					V	
Maximum DC Reverse Current at $T_A=25^{\circ}C$ Rated DC Blocking Voltage $T_A=100^{\circ}C$	I _R	0.2 50						mA
Typical Thermal Resistance	R _{eJC}	3.0						°C / W
Operating Junction and Storage Temperature Range	ТЈ,Тѕтс	-50 to +125						°C

NOTE:

Both Bonding and Chip structure are available.





RATING AND CHARACTERISTIC CURVES

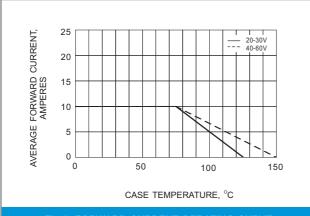


Fig.1- FORWARD CURRENT DERATING CURVE

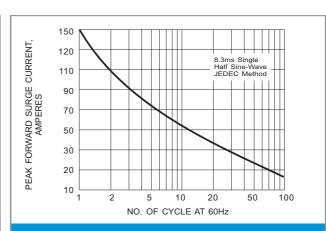


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

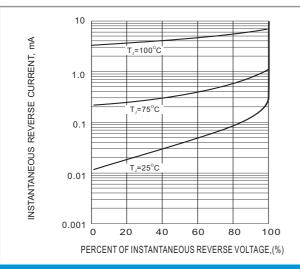


Fig.3- TYPICAL REVERSE CHARACTERISTIC

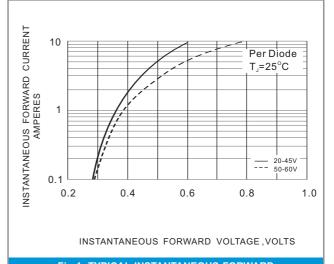


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

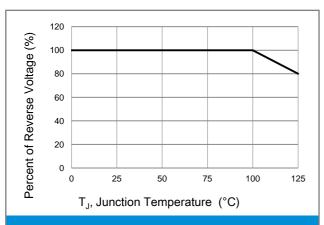


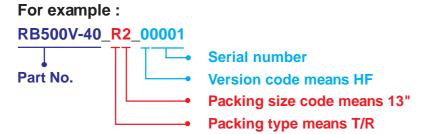
Fig.5 Operating Temperature Derating Curve





Part No_packing code_Version

SB1020CT_T0_00001



Packing Code XX					Version Code XXXXX				
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code			
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number			
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number			
Bulk Packing (B/P)	В	13"	2						
Tube Packing (T/P)	Т	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						





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