



20 AMPERE SCHOTTKY BARRIER RECTIFIERS



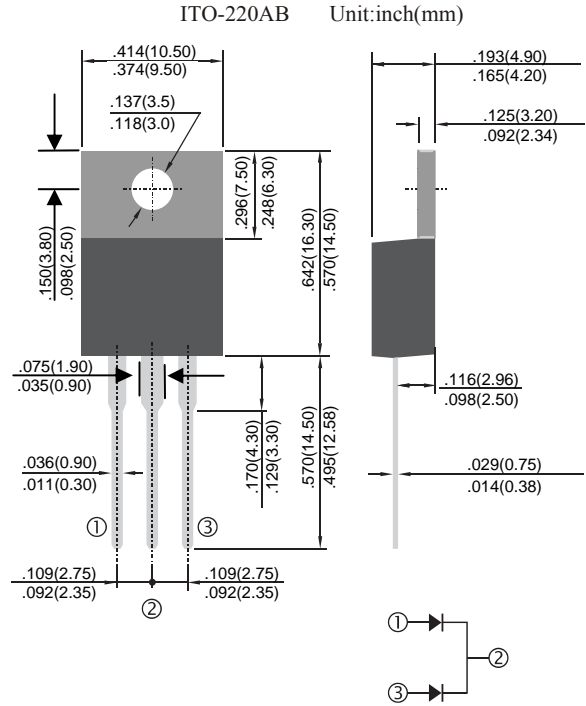
VOLTAGE - 20 to 200 Volts CURRENT - 20.0 Amperes

**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 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
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

**MECHANICAL DATA**

- Case: ITO-220AB molded plastic
- Terminals: Lead, solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Mounting Position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half wave 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

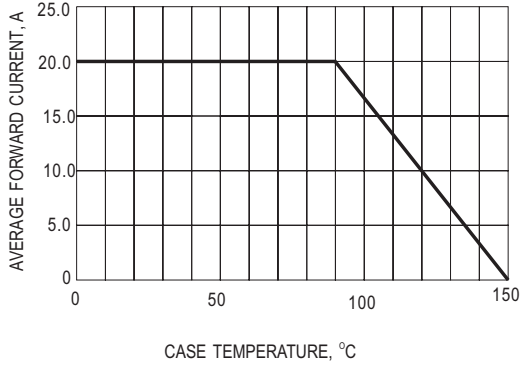
SYMBOL	SB	SB	SB	SB	SB	SB	SB	SB	SB	UNIT
	2020FCT	2030FCT	2040FCT	2050FCT	2060FCT	2080FCT	20100FCT	20150FCT	20200FCT	
Maximum Recurrent Peak Reverse Volt	20	30	40	50	60	80	100	150	200	V
Maximum RMS Volt	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Volt	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at TC=90°C	20.0									A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load(JEDEC method)	200						150			A
Maximum Forward Voltage at 10 A per element	0.55		0.75		0.85		0.95		0.99	V
Maximum DC Reverse Current at Rated TC=25 °C	0.5						0.1			mA
DC Blocking Voltage per element TC=100°C	100						7			
Typical Thermal Resistance Note RθJA	100									°C /W
Operating and Storage Temperature Range TJ,TSTG	-55 to +150									°C

NOTES:

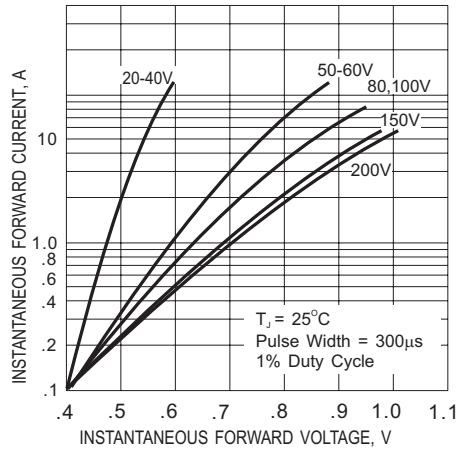
Thermal Resistance Junction to Ambient

# DEVICE CHARACTERISTICS

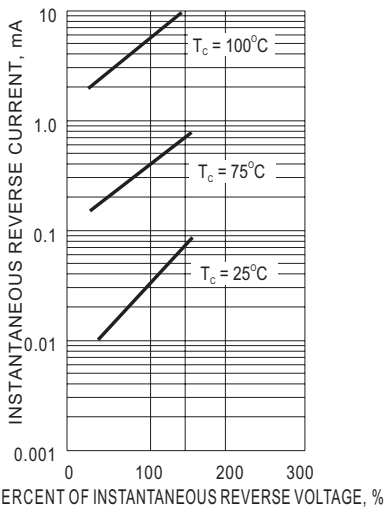
## SB2020FCT THRU SB20200FCT



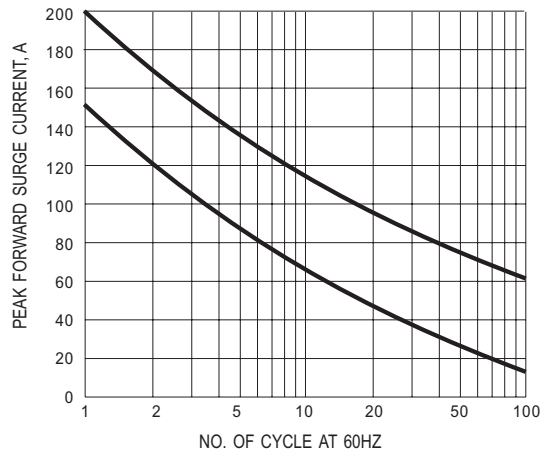
**Fig.1- FORWARD CURRENT DERATING CURVE**



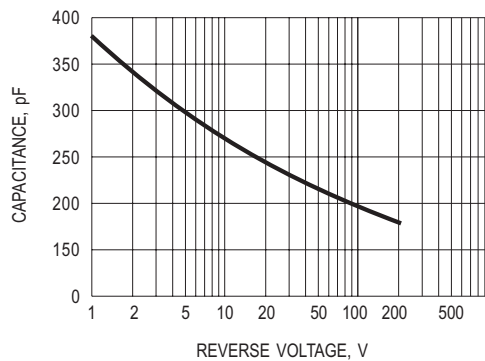
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTIC**



**Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig.5- TYPICAL JUNCTION CAPACITANCE**