



## SCHOTTKY BARRIER RECTIFIER

SRF3020C THRU SRF30100C

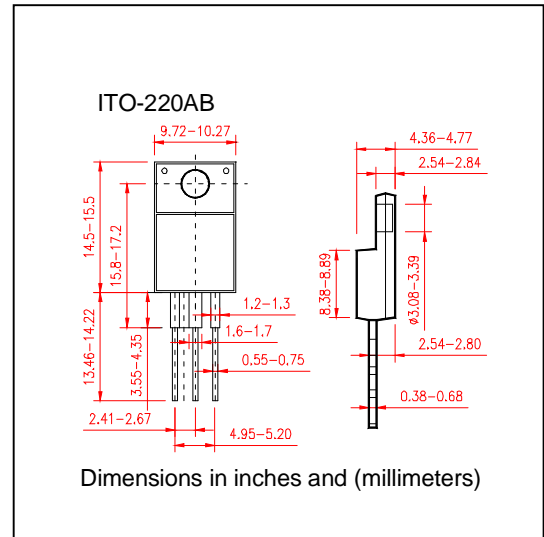
VOLTAGE RANGE 20 to 100 Volts  
CURRENT 30.0 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability classification 94V-O 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

### MECHANICAL DATA

- Case: ITO-220AB full molded Plastic package
- Terminals: lead solderable per MIL-STD-202, Method 208
- Polarity: as marked
- Mounting position: Any
- Weight: 0.08ounce, 2.24 grams



### 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%

	SYMBOLS	SRF 3020C	SRF 3030C	SRF 3035C	SRF 3040C	SRF 3045C	SRF 3050C	SRF 3060C	SRF 3080C	SRF <sub>3</sub> 0100C	SRF <sub>3</sub> 0150C	SRF <sub>3</sub> 00200 C	UNIT	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	35	40	45	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	25	28	32	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	35	40	45	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current At T <sub>C</sub> =90°C	I <sub>(AV)</sub>	30.0											Amps	
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	200											Amps	
Maximum Forward Voltage at 15.0A per element	V <sub>F</sub>	0.65			0.72			0.75			0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	T <sub>C</sub> = 25°C T <sub>C</sub> = 100°C	I <sub>R</sub>	1.0											mA
			100											
Typical Junction Capacitance(Note2)	C <sub>J</sub>	500											pF	
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	2.0											°C/W	
Operating and Storage Temperature Range	T <sub>J</sub> T <sub>STG</sub>	(-55 to +150)											°C	

#### Notes:

1. Thermal Resistance Junction to Ambient
2. Measured at V<sub>R</sub>=4v and f=1MHz



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www.datasheet4u.com

### RATING AND CHARACTERISTIC CURVES SRF3020C THRU SRF30100C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

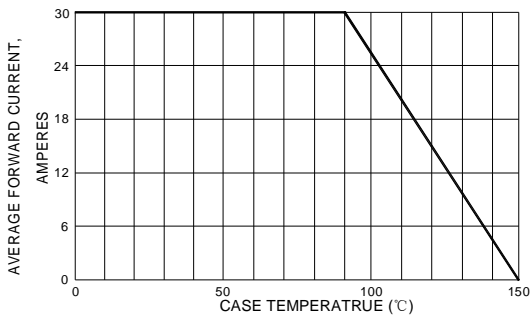


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

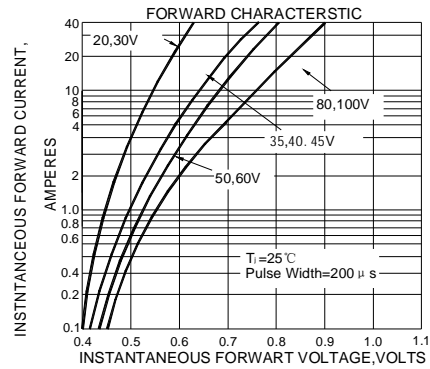


FIG.2-TYPICAL REVERSE CHARACTERISTICS

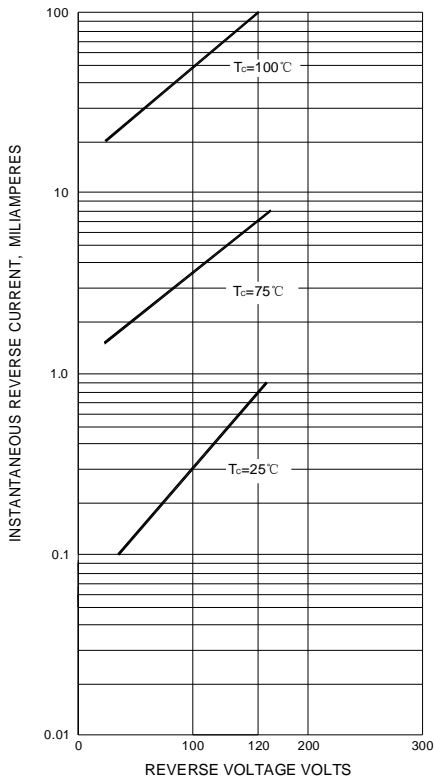


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

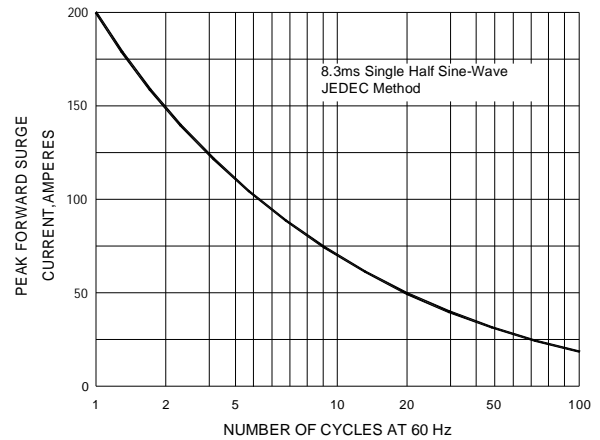


FIG.5-TYPICAL JUNCTION CAPACITANCE

