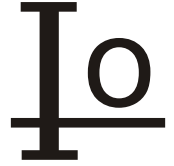


# SRF3020 THRU SRF30200

SCHOTTKY BARRIER RECTIFIER  
Reverse Voltage - 20 to 200 Volts  
Forward Current - 30Amperes



## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2001 1/65/ EC

## MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 1.81 gram
- \* Lead Free Finish/RoHS Compliant

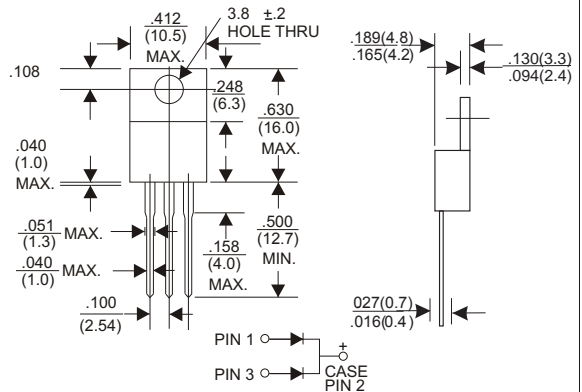
## VOLTAGE RANGE

20 to200 Volts

## CURRENT

30.0 Ampere

## ITO-220AB



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SRF 3020	SRF 3030	SRF 3040	SRF 3045	SRF 3060	SRF 3080	SRF 30100	SRF 30150	SRF 30200	Units	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	45	60	80	100	150	200	Volts	
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	32	42	56	70	105	140	Volts	
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	45	60	80	100	150	200	Volts	
Maximum average forward rectified current(see Fig.1)	I <sub>(AV)</sub>	15.0									Amps	
Per leg		30.0										
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	250.0									Amps	
Maximum instantaneous forward voltage at 15.0 A	V <sub>F</sub>	0.65			0.75		0.85		0.90		0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	0.5									mA	
		30			50							
Typical thermal resistance (Note 2)	R <sub>θJC</sub>	3.0									°C/W	
Operating junction temperature range	T <sub>J</sub>	-65 to +150									°C	
Storage temperature range	T <sub>STG</sub>	-65 to +150									°C	

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle  
2.Thermal resistance from junction to case

## RATING AND CHARACTERISTIC CURVES (SRF3020 THRU SRF30200)

FIG.1-FORWARD CURRENT DERATING CURVE

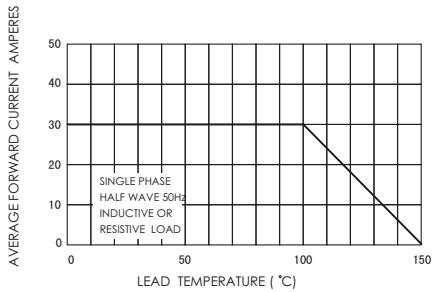


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

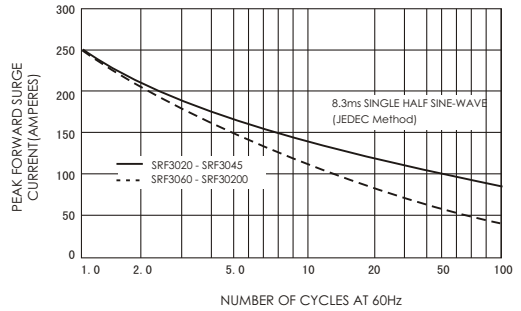


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

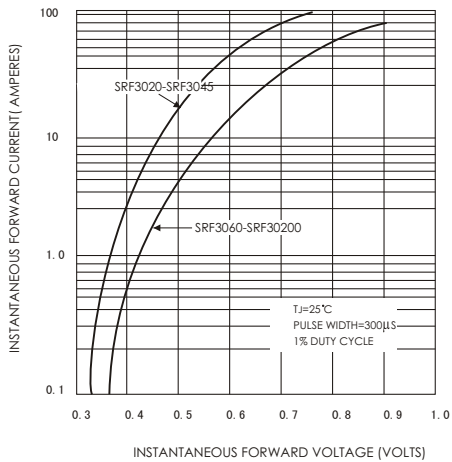


FIG.4-TYPICAL REVERSE CHARACTERISTICS

