



# SRAF1020 THRU SRAF1090

Isolation 10.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 90 Volts  
Current  
10.0 Amperes

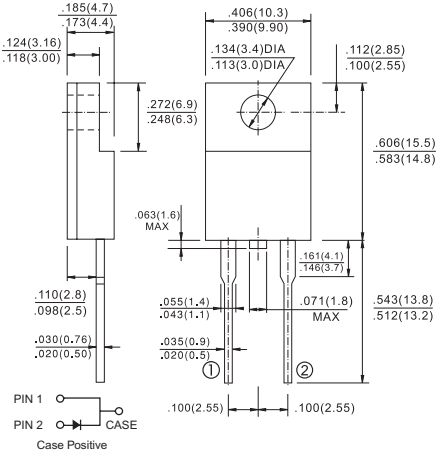
## Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

## Mechanical Data

- ✧ Cases: ITO-220AC molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminals: Lead solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/ .25", (6.35mm) from case.
- ✧ Weight: 2.24 grams
- ✧ Mounting torque: 5 in – 1bs. max.

## ITO-220AC



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	SRAF 1020	SRAF 1030	SRAF 1040	SRAF 1050	SRAF 1060	SRAF 1090	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	90	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	63	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	90	V
Maximum Average Forward Rectified Current @Tc=110°C	I <sub>(AV)</sub>	10.0						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	250						A
Maximum Instantaneous Forward Voltage 10.0A	V <sub>F</sub>	0.55			0.70		0.75	V
Maximum D.C. Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I <sub>R</sub>	1.0 50						mA mA
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	4.0						°C/W
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	420			280		165	pF
Operating Junction Temperature Range	T <sub>J</sub>	-65 to +125			-65 to +150			°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150						°C

Notes: 1. Thermal Resistance from Junction to Case Per Leg

2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.

## RATINGS AND CHARACTERISTIC CURVES (SRAF1020 THRU SRAF1090)

FIG.1- FORWARD CURRENT DERATING CURVE

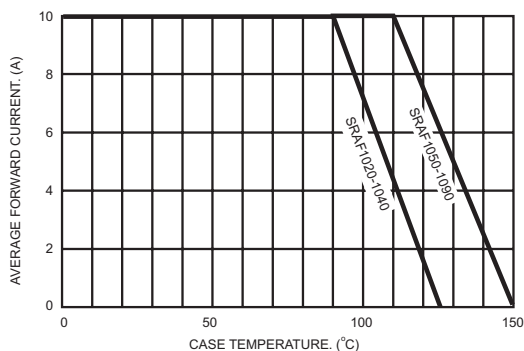


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

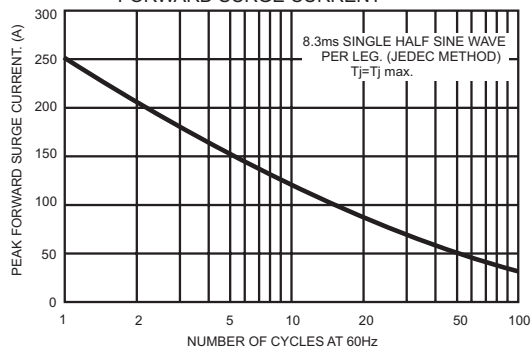


FIG.3- TYPICAL REVERSE CHARACTERISTICS

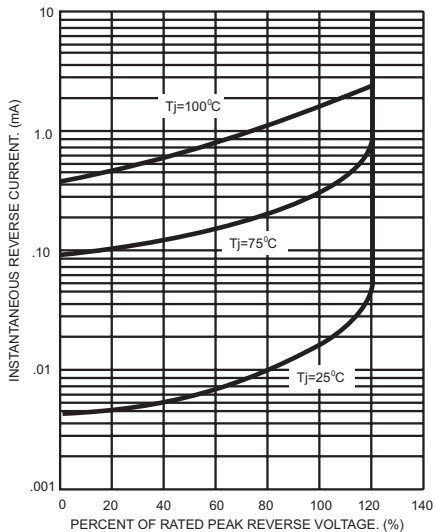


FIG.4- TYPICAL FORWARD CHARACTERISTICS

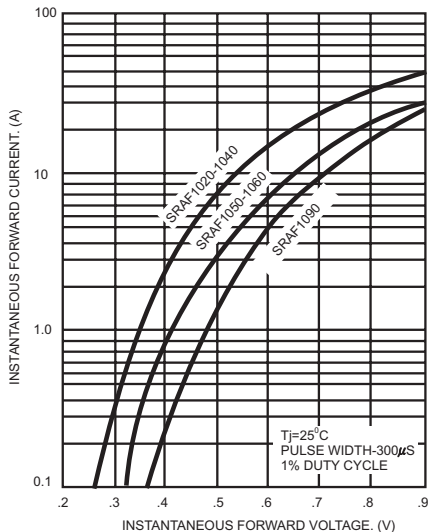


FIG.5- TYPICAL JUNCTION CAPACITANCE

