



# SRAF540 THRU SRAF5100

Isolation 5.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
40 to 100 Volts  
Current  
5.0 Amperes

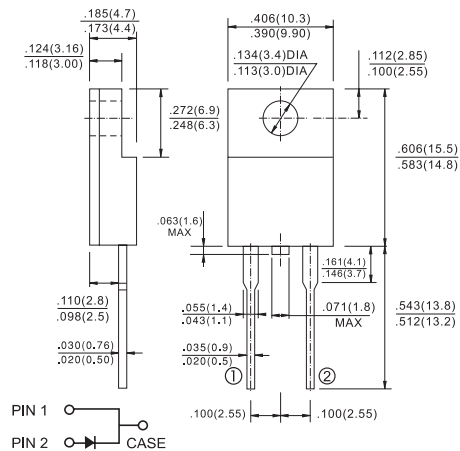
## Features

- ✧ 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: Leads 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

## 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	SRAF540	SRAF560	SRAF590	SRAF5100	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	90	100	V
Maximum RMS Voltage	$V_{RMS}$	28	42	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	90	100	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	5.0				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150		200		A
Maximum Instantaneous Forward Voltage @5.0A	$V_F$	0.55	0.70	0.85		V
Maximum D.C. Reverse Current @ $T_c=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_c=125^\circ\text{C}$	$I_R$	0.5 50		0.2 10		mA mA
Typical Thermal Resistance (Note 1)	$R\theta_{JC}$	5.0			10	$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	$C_j$	460		112		pF
Operating Junction Temperature Range	$T_J$	-65 to +150				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150				$^\circ\text{C}$

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

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

## RATINGS AND CHARACTERISTIC CURVES (SRAF540 THRU SRAF5100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

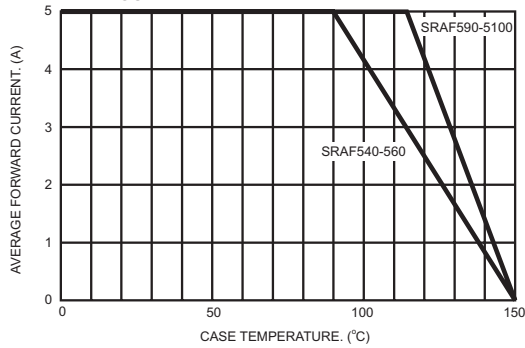


FIG.2- TYPICAL REVERSE CHARACTERISTICS

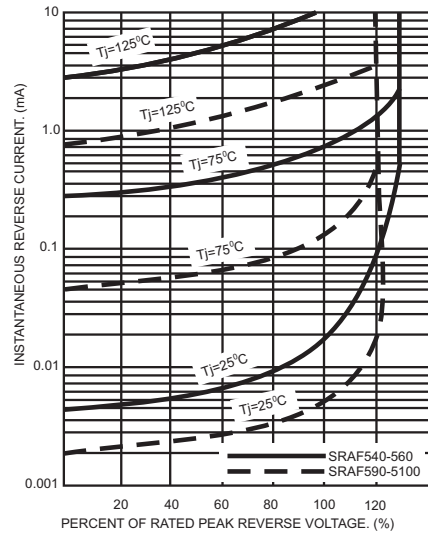


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

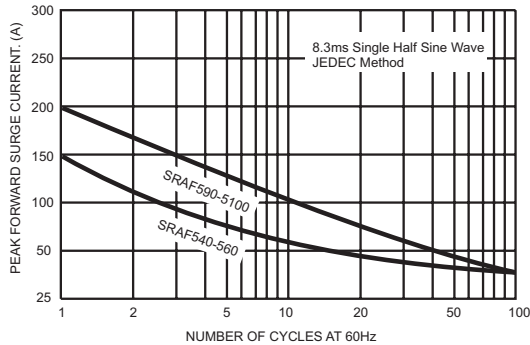


FIG.5- TYPICAL FORWARD CHARACTERISTICS

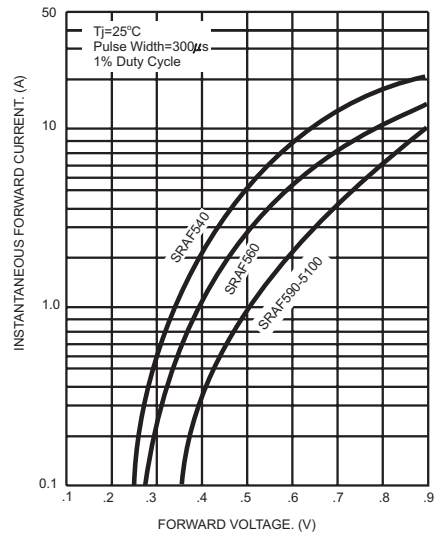


FIG.4- TYPICAL JUNCTION CAPACITANCE

