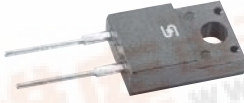




SRAF540 THRU SRAF5100

Isolation 5.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
40 to 100 Volts
Current
5.0 Amperes

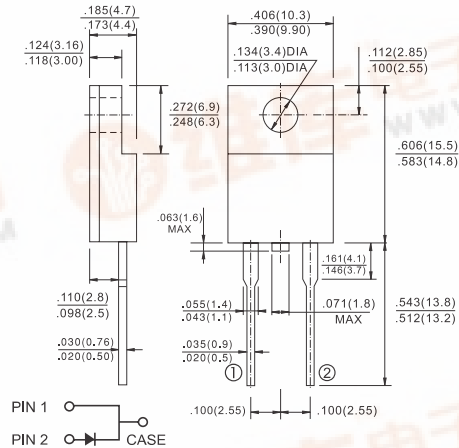
Features

- ◇ 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	°C/W
Typical Junction Capacitance (Note 2)	C_j	460		112		pF
Operating Junction Temperature Range	T_J	-65 to +150				°C
Storage Temperature Range	T_{STG}	-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.





RATINGS AND CHARACTERISTIC CURVES (SRAF540 THRU SRAF5100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

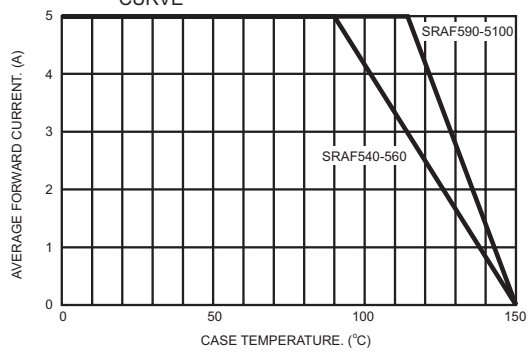


FIG.2- TYPICAL REVERSE CHARACTERISTICS

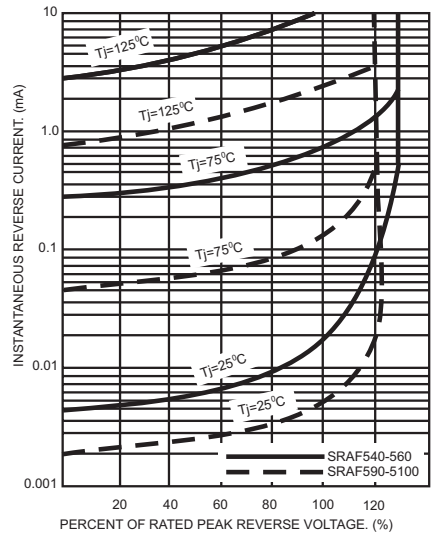


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

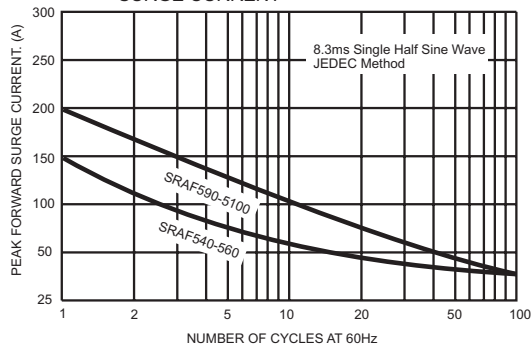


FIG.5- TYPICAL FORWARD CHARACTERISTICS

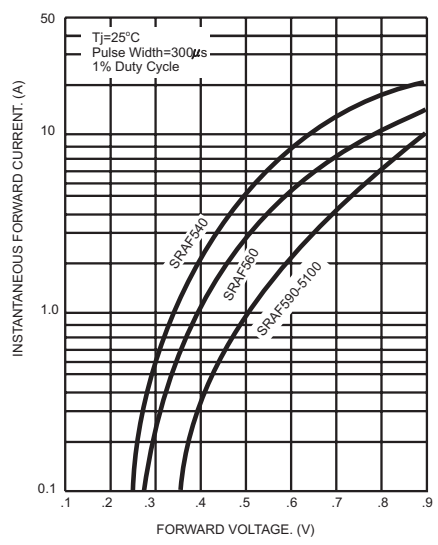


FIG.4- TYPICAL JUNCTION CAPACITANCE

