



SRAF1620 - SRAF16100

16.0AMPS. Isolated Schottky Barrier Rectifiers

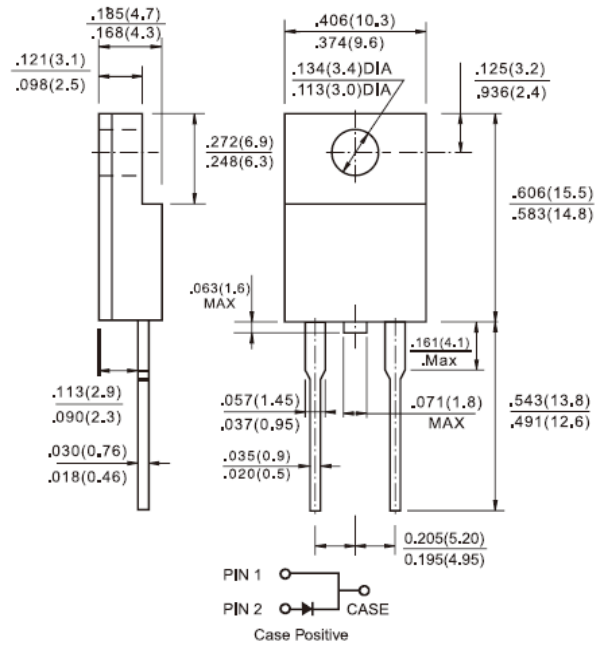
ITO-220AC

Features

- ✧ UL Recognized Flie # E-326243
- ✧ Isolated Plastic package.
- ✧ Low power loss, High efficiency.
- ✧ High current capability, Low VF.
- ✧ High reliability
- ✧ High surge current capability.
- ✧ Epitaxial construction.
- ✧ Guard-ring for transient protection.
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

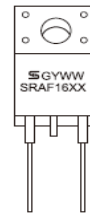
Mechanical Data

- ✧ Cases: ITO-220AC molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, lead free. 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: 1.70 grams
- ✧ Mounting torque: 5 in - 1bs. Max.



Dimensions in inches and (millimeters)

Marking Diagram



- SRAF16XX = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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 1620	SRAF 1630	SRAF 1640	SRAF 1650	SRAF 1660	SRAF 1690	SRAF 16100	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	V
Maximum Average Forward Rectified Current See Fig. 1	$I_{F(AV)}$	16							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	275							A
Maximum Instantaneous Forward Voltage (Note 1) @ 16 A	V_F	0.55		0.70		0.92		V	
Maximum D.C. Reverse Current at Rated DC Blocking Voltage	I_R	0.5					0.1		mA
@ $T_A=25\text{ }^\circ\text{C}$		15		10		-		mA	
@ $T_A=100\text{ }^\circ\text{C}$		-					5.0		mA
Typical Junction Capacitance (Note 2)	C_j	850		580		480		pF	
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	4							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 65 to + 125			- 65 to + 150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 150							$^\circ\text{C}$

Note1: Pulse Test: 300us Pulse Width, 1% Duty cycle

Note2: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Note3: Mounted on Heatsink Size of (2" x 3" x 0.25") Al-Plate.

RATINGS AND CHARACTERISTIC CURVES (SRAF1620 THRU SRAF16100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

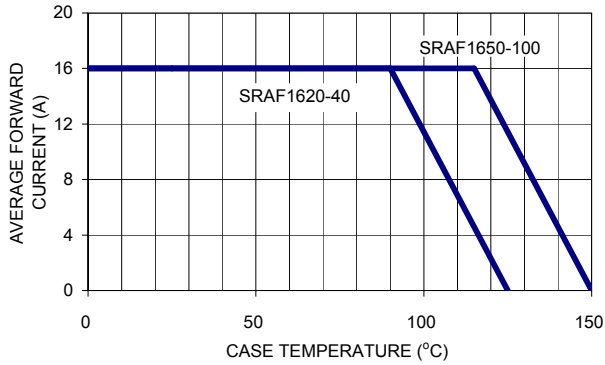


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

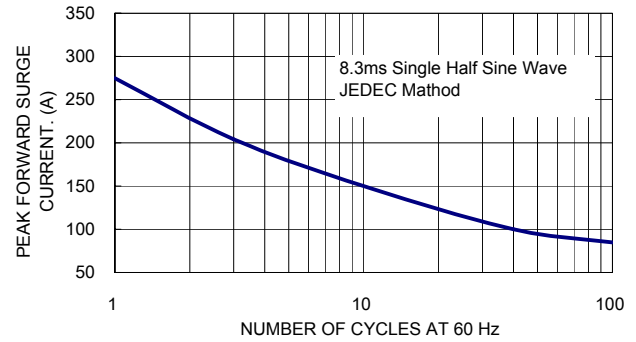


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

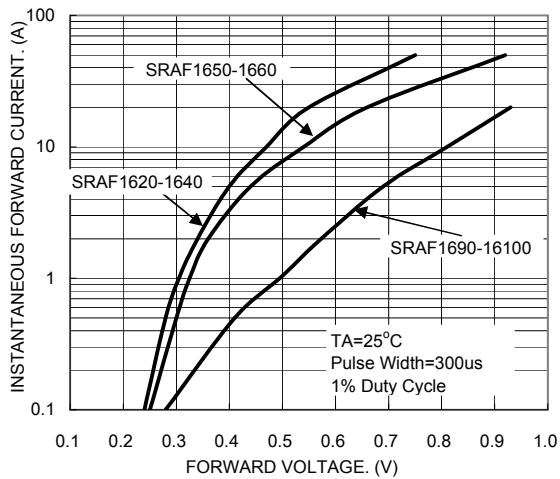


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

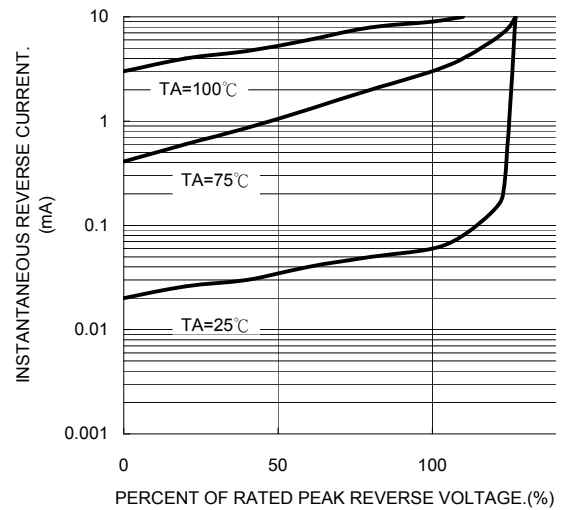


FIG. 5- TYPICAL JUNCTION CAPACITANCE

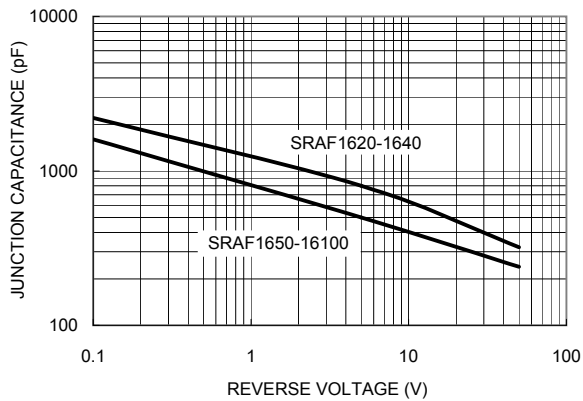


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

