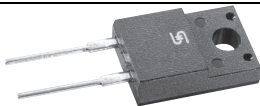




# SRAF1620 THRU SRAF1660

## Isolation 16.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
16.0 Amperes

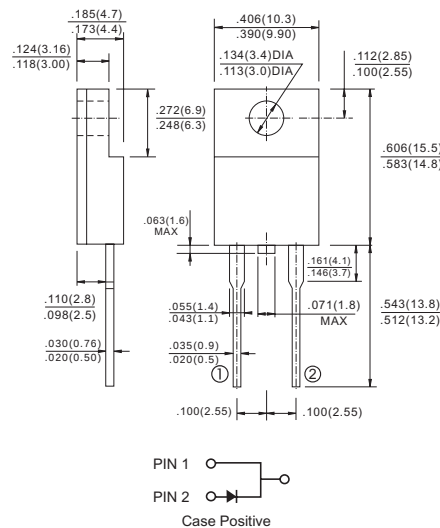
### Features

- ✧ 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
- ✧ 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<br>1620 | SRAF<br>1630 | SRAF<br>1640 | SRAF<br>1650 | SRAF<br>1660 | Units    |
|-----------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|----------|
| Maximum Recurrent Peak Reverse Voltage                                                                    | V <sub>RRM</sub>  | 20           | 30           | 40           | 50           | 60           | V        |
| Maximum RMS Voltage                                                                                       | V <sub>RMS</sub>  | 14           | 21           | 28           | 35           | 42           | V        |
| Maximum DC Blocking Voltage                                                                               | V <sub>DC</sub>   | 20           | 30           | 40           | 50           | 60           | V        |
| Maximum Average Forward Rectified Current<br>See Fig. 1                                                   | I <sub>(AV)</sub> | 16.0         |              |              |              |              | A        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method ) | I <sub>FSM</sub>  | 275          |              |              |              |              | A        |
| Maximum Instantaneous Forward Voltage<br>@16.0A                                                           | V <sub>F</sub>    | 0.55         |              |              | 0.70         |              | V        |
| Maximum D.C. Reverse Current @ Tc=25°C<br>at Rated DC Blocking Voltage @ Tc=100°C                         | I <sub>R</sub>    | 1.0<br>50    |              |              |              |              | mA<br>mA |
| Typical Thermal Resistance (Note 1)                                                                       | R θ JC            | 3.0          |              |              |              |              | °C/W     |
| Typical Junction Capacitance (Note 2)                                                                     | Cj                | 750          |              |              | 500          |              | 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.

## RATINGS AND CHARACTERISTIC CURVES (SRAF1620 THRU SRAF1660)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

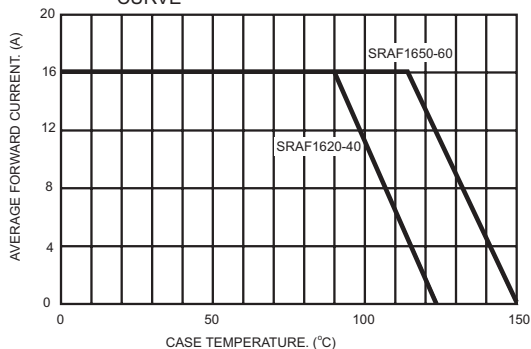


FIG.2- TYPICAL REVERSE CHARACTERISTICS

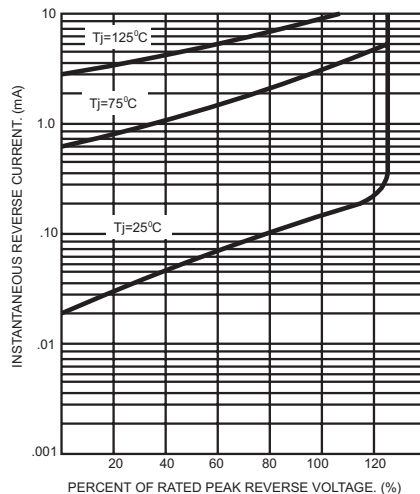


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

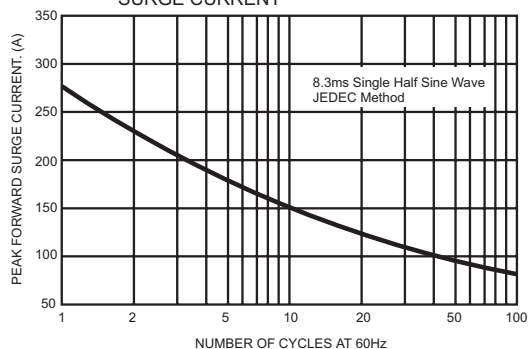


FIG.5- TYPICAL FORWARD CHARACTERISTICS

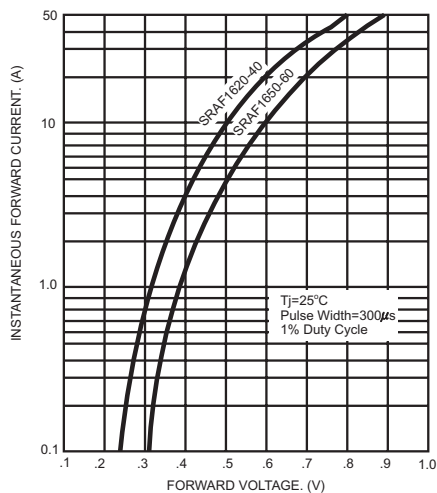


FIG.4- TYPICAL JUNCTION CAPACITANCE

