



# SRF1620 THRU SRF16100

## Isolation 16.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 100 Volts  
Current  
16.0 Amperes

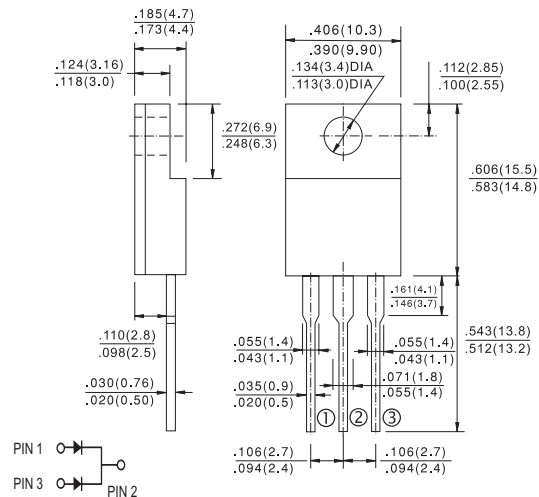
### Features

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

### Mechanical Data

- ✧ Cases: ITO-220AB 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-220AB



**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	SRF 1620	SRF 1630	SRF 1640	SRF 1650	SRF 1660	SRF 16100	Units	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	100	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	70	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	100	V	
Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	16.0						A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	200						A	
Maximum Instantaneous Forward Voltage @8.0A	$V_F$	0.55		0.70		0.90		V	
Maximum D.C. Reverse Current @ $T_c=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_c=100^\circ\text{C}$	$I_R$	0.5				0.1		mA	
		50				60		mA	
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5					4.0		°C/W
Typical Junction Capacitance (Note 2)	$C_j$	480			300		112		pF
Operating Junction Temperature Range	$T_J$	-65 to +125			-65 to +150				°C
Storage Temperature Range	$T_{STG}$	-65 to +150							°C

Notes: 1. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.  
2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

## RATINGS AND CHARACTERISTIC CURVES (SRF1620 THRU SRF16100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

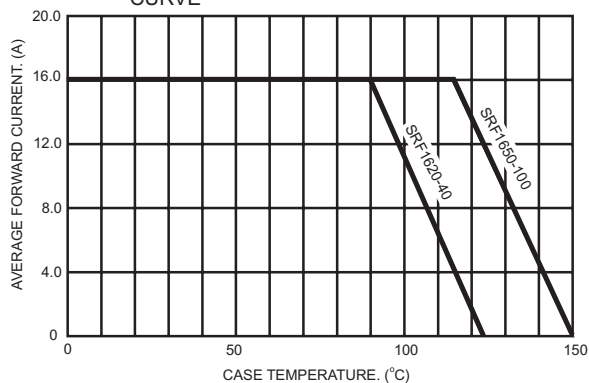


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

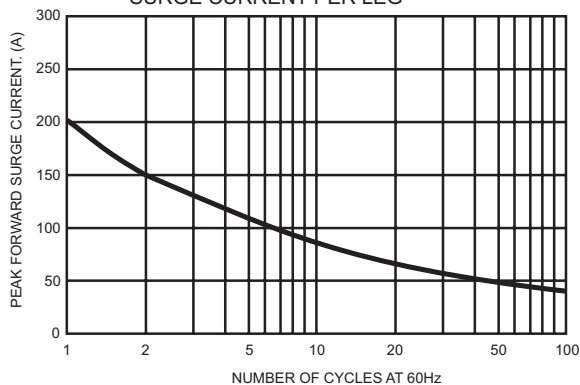


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

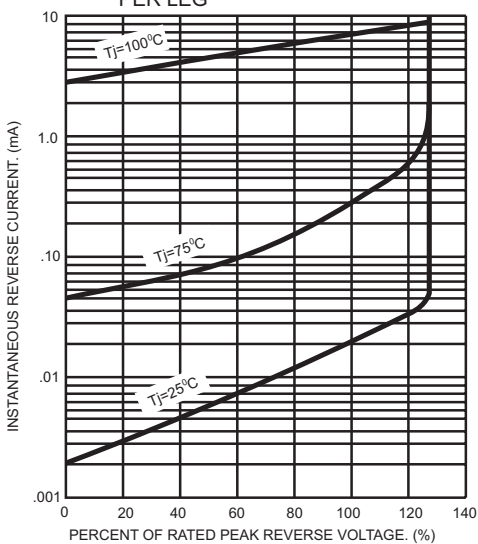


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

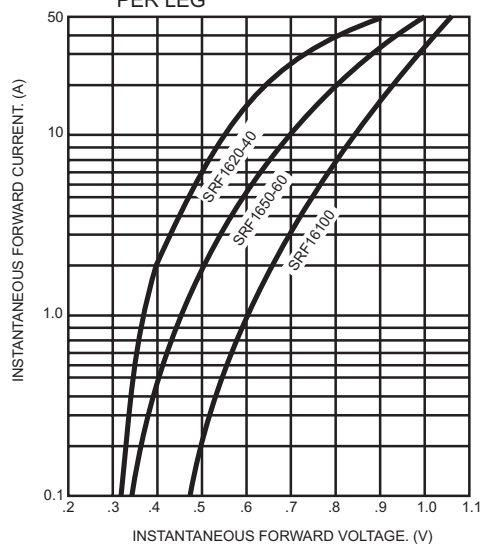


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

