

# SRF2090      THUR      SRF20100

## SCHOTTKY BARRIER RECTIFIERS

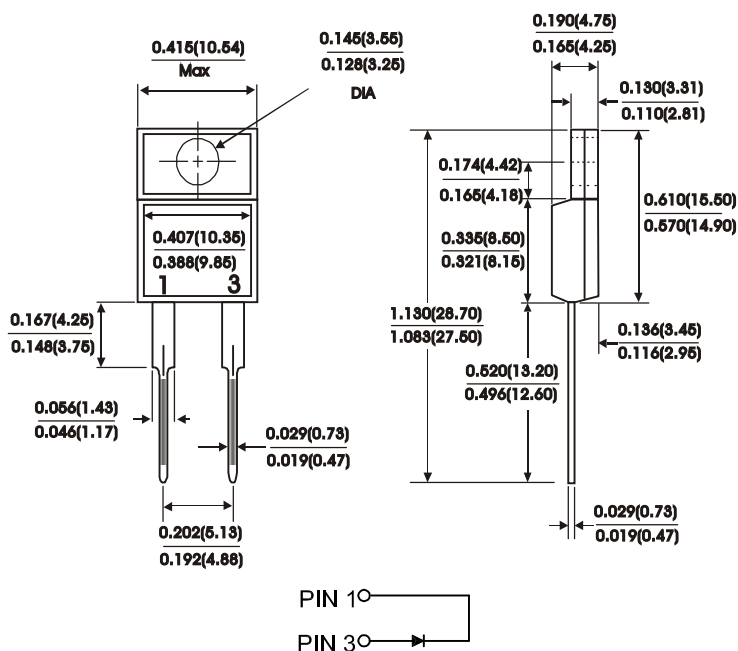
### FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25"(6.35mm) from case

### MECHANICAL DATA

Case : JEDEC ITO-220AC molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Polarity : As marked  
 Mounting Postition : Any  
 Mounting Torque 5 in - lbs.max  
 Weight : 0.08 ounce, 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%.

Characteristic	Symbol	SRF2090	SRF20100	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	90	100	Volts
Maximum RMS voltage	$V_{RMS}$	63	70	Volts
Maximum DC blocking voltage	$V_{DC}$	90	100	Volts
Maximum average forward rectified current at $T_c = 125^\circ\text{C}$	$I_{(AV)}$	20		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	300		Amps
Maximum instantaneous forward voltage (NOTE 2) $I_F = 20\text{A}$	$V_F$	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_c = 25^\circ\text{C}$ $T_c = 100^\circ\text{C}$	$I_R$	0.1 6.0		mA
Typical thermal resistance (NOTE 1)	$R_{th-JC}$	6.0		$^\circ\text{C/W}$
Operating temperature range	$T_J$	-65to +150		$^\circ\text{C}$
Storage temperature range	$T_{Stg}$	-65to +175		$^\circ\text{C}$

NOTES:

- (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

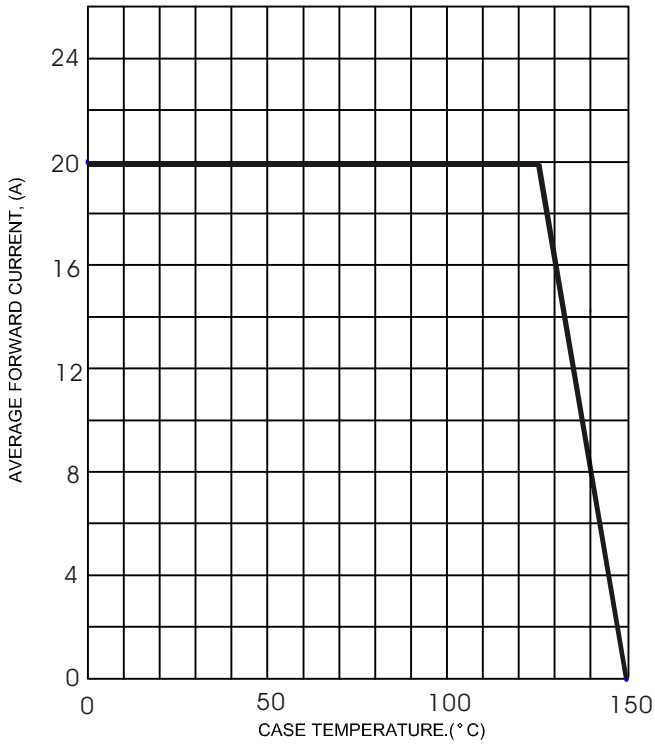


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

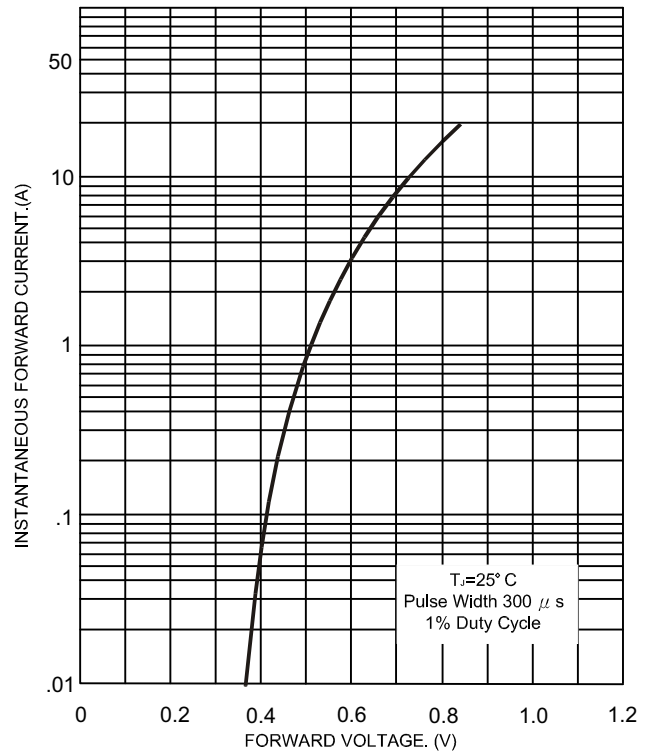


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

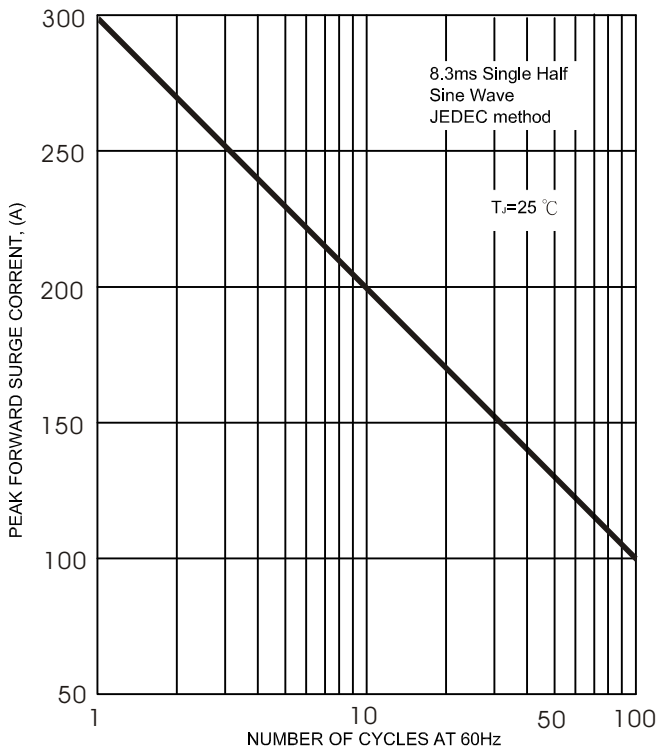


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

