

# SRF1020 THUR SRF1060

## SCHOTTKY BARRIER RECTIFIERS

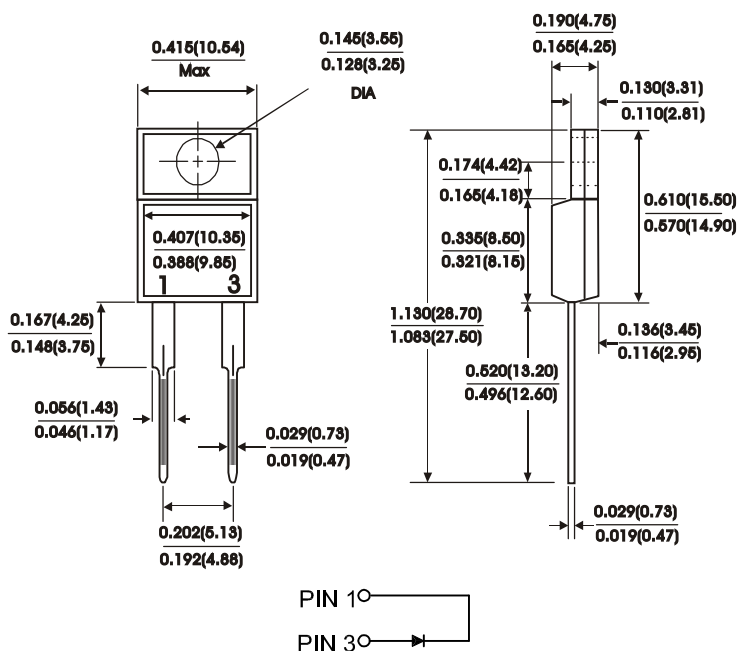
### ITO-220AC

#### 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



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	SRF1020	SRF1030	SRF1035	SRF1040	SRF1045	SRF1050	SRF1060	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at (See Fig. 1)	$I_{(AV)}$	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							Amps
Maximum instantaneous forward voltage $I_F = 10A$ (NOTE 2) $I_F = 20A$	$V_F$			0.63			0.80		Volts
				0.84			0.95		
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_C = 25^\circ C$ $T_C = 125^\circ C$	$I_R$				0.5				mA
					15.0				
Typical thermal resistance (NOTE 1)	$R_{th-JC}$	4.0							°C/W
Operating temperature range	$T_J$	-65 to +150							°C
Storage temperature range	$T_{Stg}$	-65 to +175							°C

NOTES:

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

# RATINGS AND CHARACTERISTIC CURVES SRF1020 THRU SRF1060

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

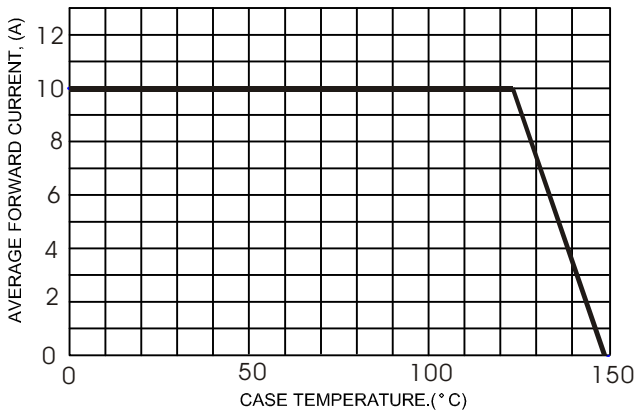


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

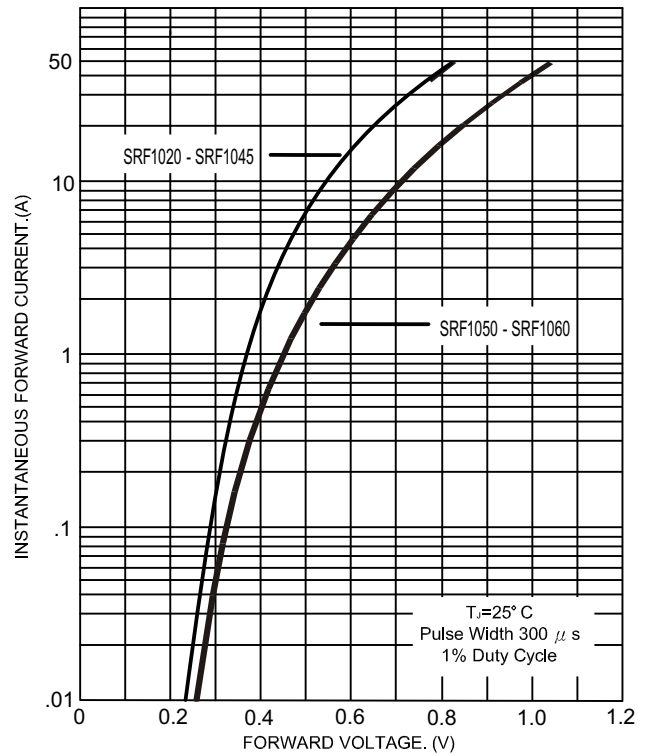


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

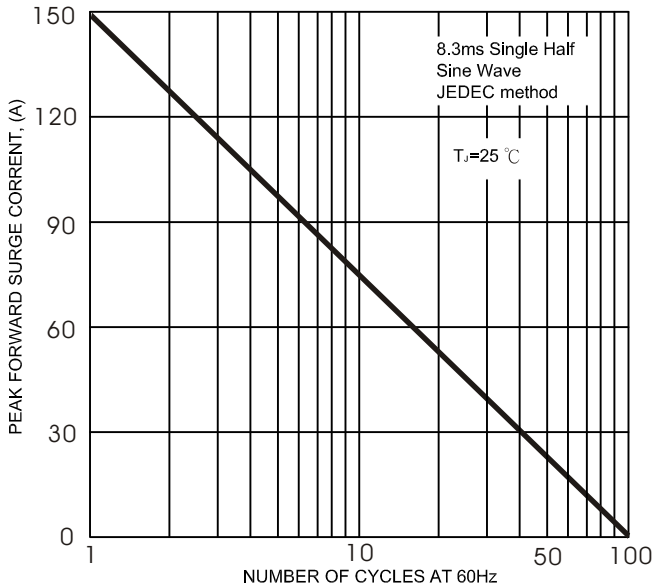


FIG.5- TYPICAL REVERSE CHARACTERISTICS

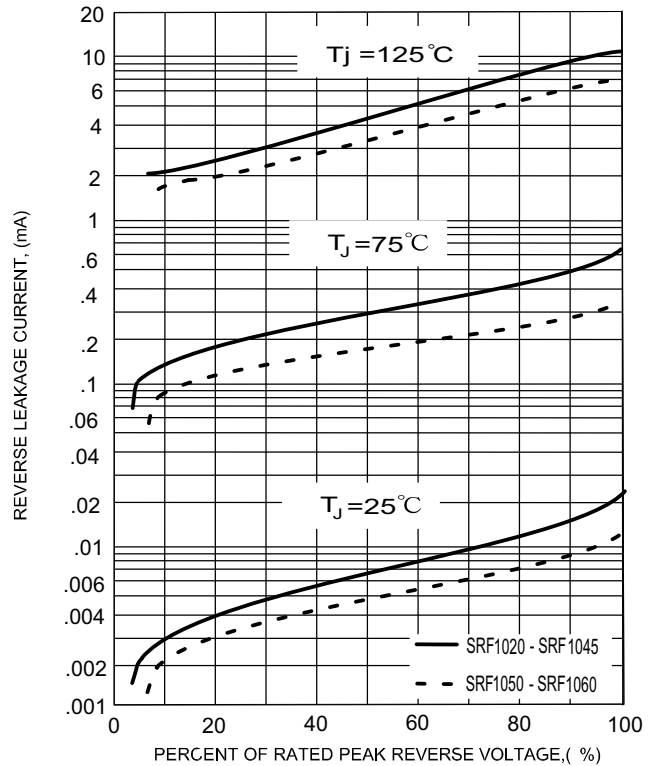


FIG.4- TYPICAL JUNCTION CAPACITANCE

