

# SRF1090CT THUR SRF10100CT

## SCHOTTKY BARRIER RECTIFIERS

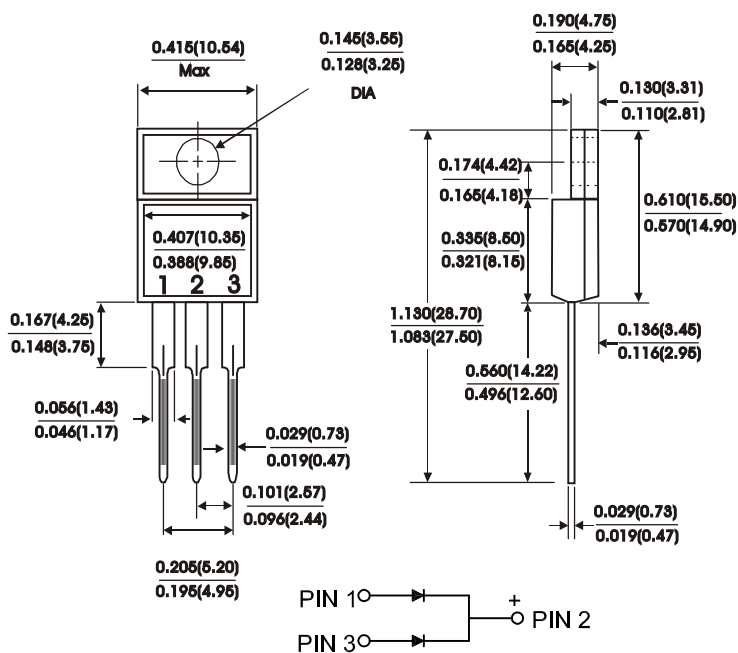
### ITO-220AB

#### FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- 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-220AB molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Polarity : As marked  
 Mounting Position : 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	SRF1090CT	SRF10100CT	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 $T_C=125^\circ C$	$I_{(AV)}$	10		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	$I_{FSM}$	120		Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F=5.0A$	$V_F$	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) $T_C=25^\circ C$ $T_C=125^\circ C$	$I_R$	0.5 50.0		mA
Typical thermal resistance(Per leg)(NOTE 1)	$R_{th-JC}$	5.0		$^\circ C/W$
Operating temperature range	$T_J$	-65to +150		$^\circ C$
Storage temperature range	$T_{Stg}$	-65to +150		$^\circ C$

#### NOTES:

(1) Thermal resistance from junction to case

(2) Pulse test : 300 us pulse width, 1% duty cycle

(3) Marking :  $\frac{SRF1090CT}{Symbol} = \frac{SRF1090}{Marking}$  (Whitout Marking "CT")

# RATINGS AND CHARACTERISTIC CURVES SRF1090CT THRU SRF10100CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

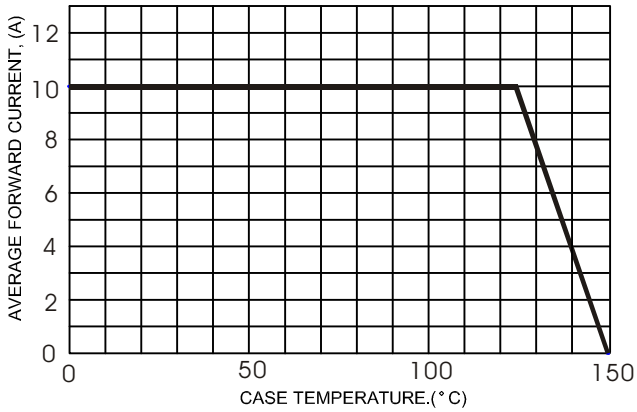


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

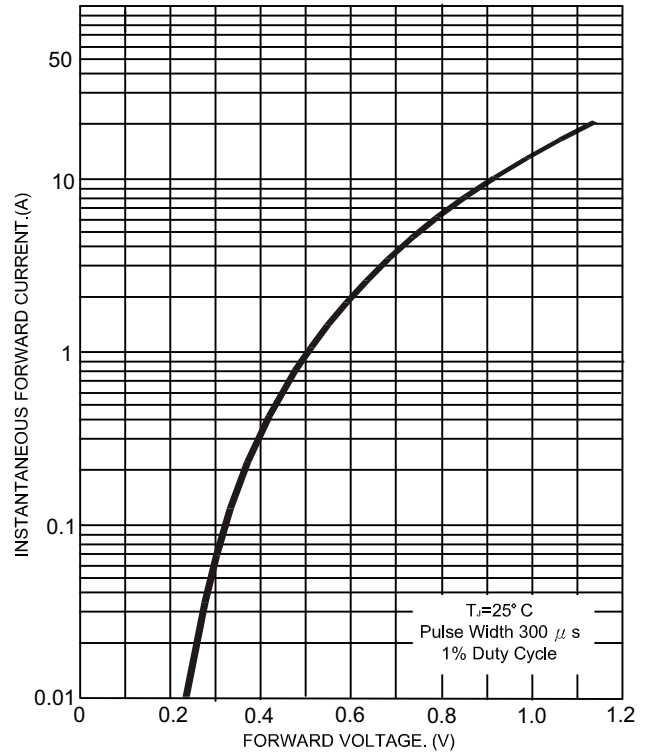


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

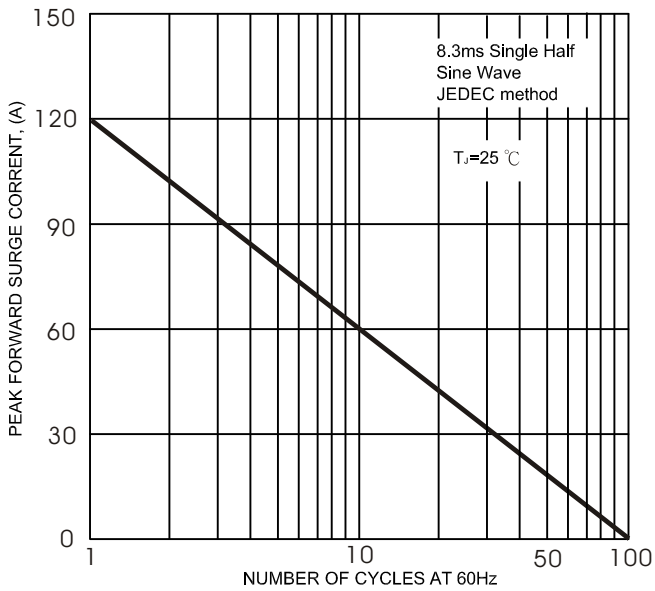


FIG.5- TYPICAL REVERSE CHARACTERISTICS

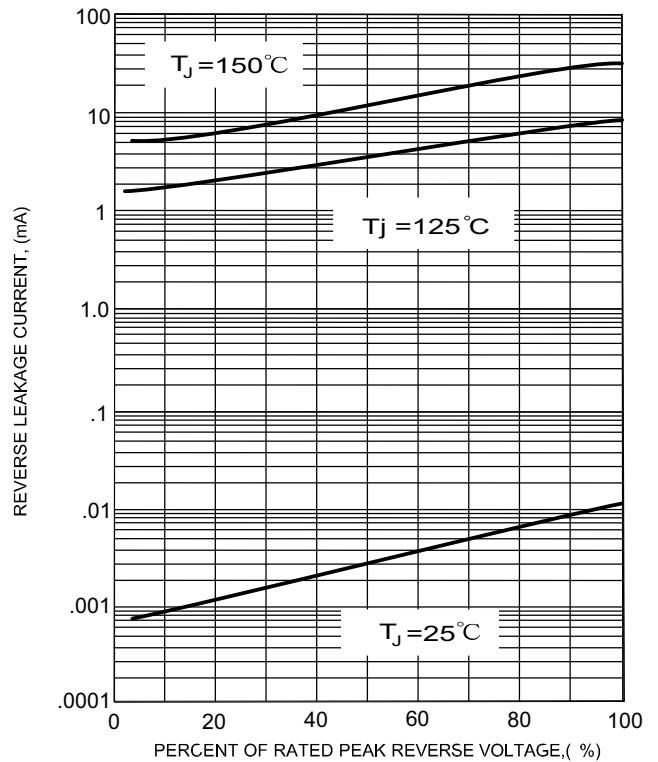


FIG.4- TYPICAL JUNCTION CAPACITANCE

