

# SRF1020CT THUR SRF1060CT

## SCHOTTKY BARRIER RECTIFIERS

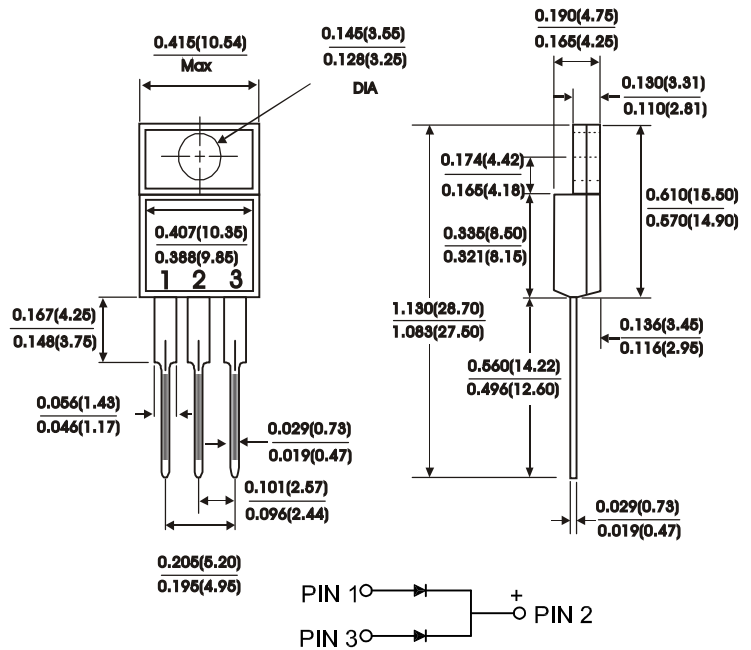
### ITO-220AB

#### 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	SRF 1020CT	SRF 1030CT	SRF 1035CT	SRF 1040CT	SRF 1045CT	SRF 1050CT	SRF 1060CT	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 $T_c = 125^\circ\text{C}$	$I_{(AV)}$	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) $I_F = 5.0A$	$V_F$	0.65					0.75		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_c = 25^\circ\text{C}$ $T_c = 125^\circ\text{C}$	$I_R$	0.5					50.0		mA
Typical thermal resistance(Per leg)(NOTE 1)	$R_{th-JC}$	5.0							$^\circ\text{C}/\text{W}$
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
- (3) Marking :  $\frac{\text{SRF1020CT}}{\text{Symbol}} = \frac{\text{SRF1020}}{\text{Marking}}$  (Without Marking "CT")

# RATINGS AND CHARACTERISTIC CURVES SRF1020CT THRU SRF1060CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

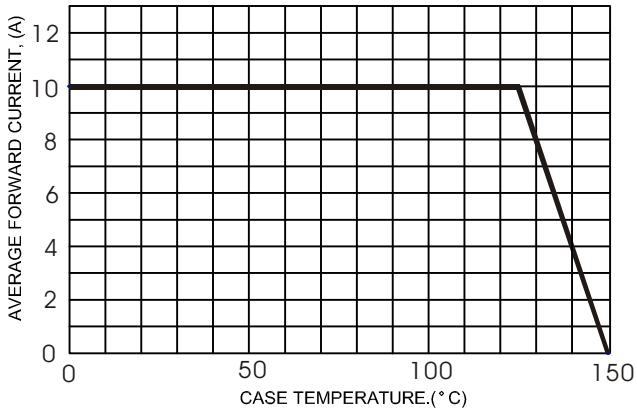


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

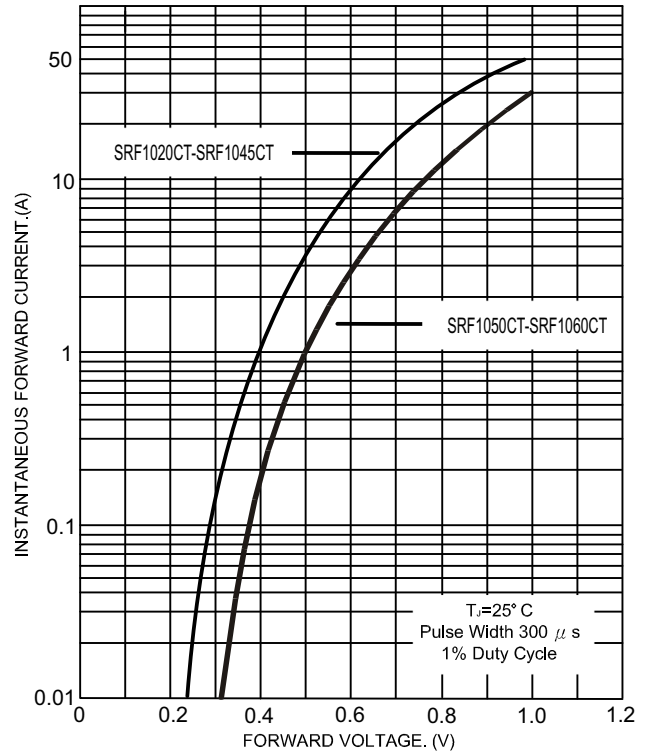


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

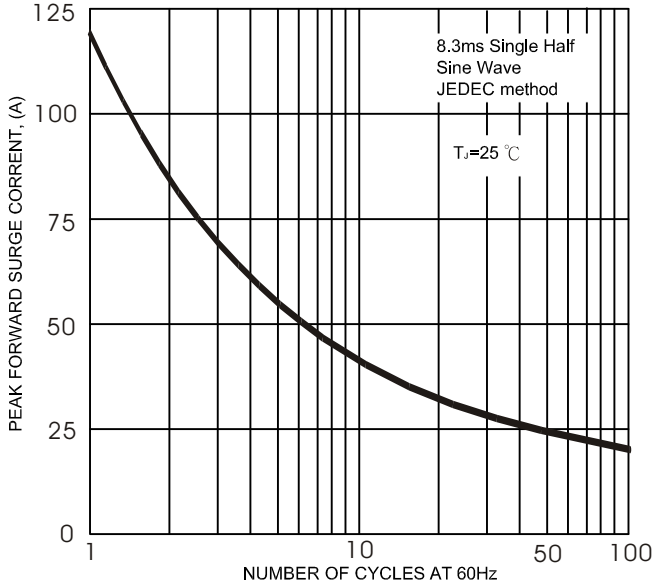


FIG.5- TYPICAL REVERSE CHARACTERISTICS

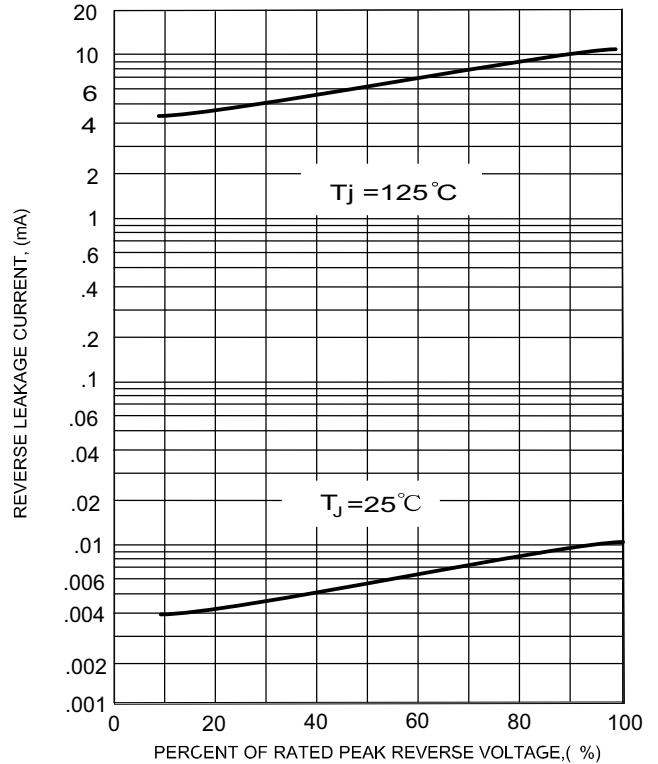


FIG.4- TYPICAL JUNCTION CAPACITANCE

