

# SRL1020CT THUR SRL1040CT

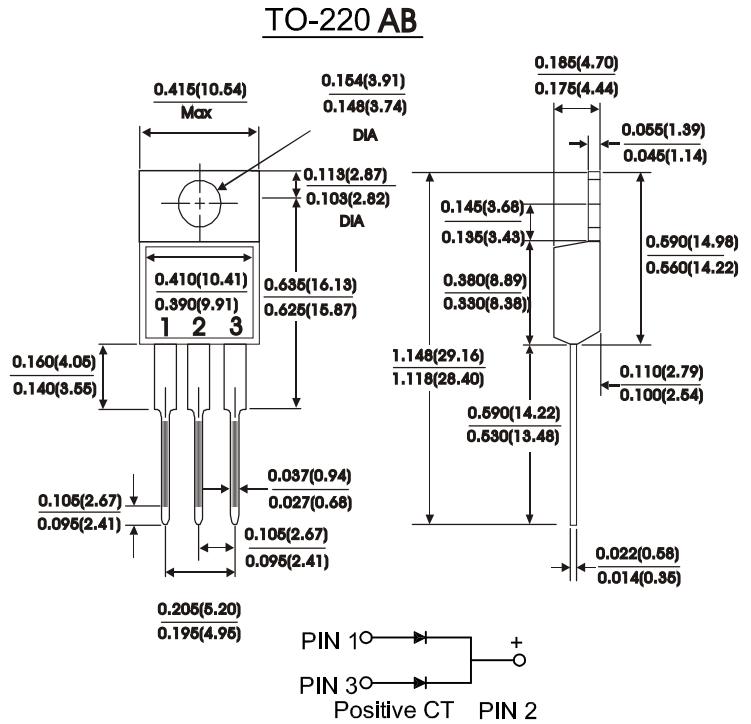
## SCHOTTKY BARRIER RECTIFIERS

### 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 TO-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	SRL1020CT	SRL1030CT	SRL1040CT	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	Volts
Maximum average forward rectified current at $T_c = 105^\circ\text{C}$	$I_o$	10			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	$I_{FSM}$	110			Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 5.0A$	$V_F$	0.55			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_c = 25^\circ\text{C}$ $T_c = 100^\circ\text{C}$	$I_R$	0.5 50			mA
Typical thermal resistance(Per leg)(NOTE 1)	$R_{th-JC}$	3.0			$^\circ\text{C/W}$
Operating temperature range	$T_J$	-40to + 125			$^\circ\text{C}$
Storage temperature range	$T_{Stg}$	-40to + 125			$^\circ\text{C}$

- NOTES:  
 (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle  
 (3) Marking : SRL1020CT = 

SRL1020	CT
Symbol	Marking

 (Without Marking "CT")

# RATINGS AND CHARACTERISTIC CURVES SRL1020CT THRU SRL1040CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

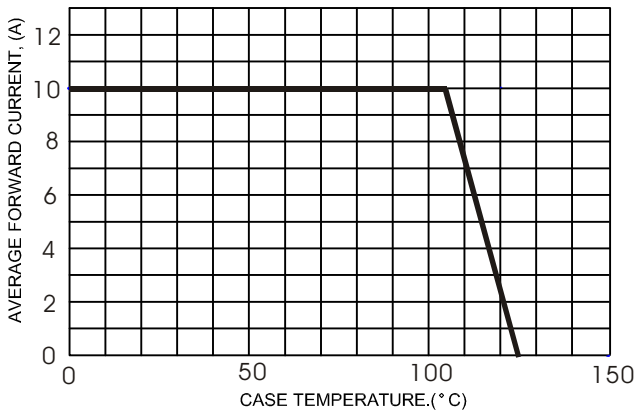


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

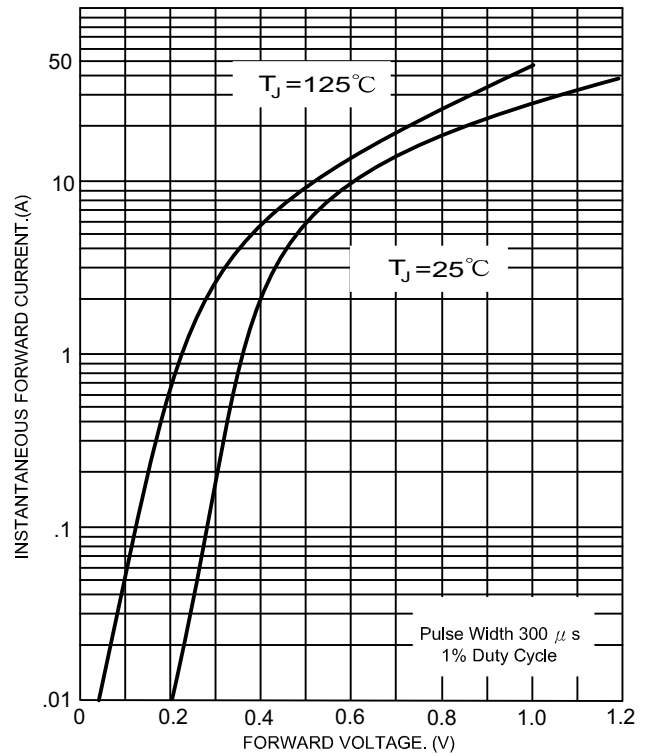


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

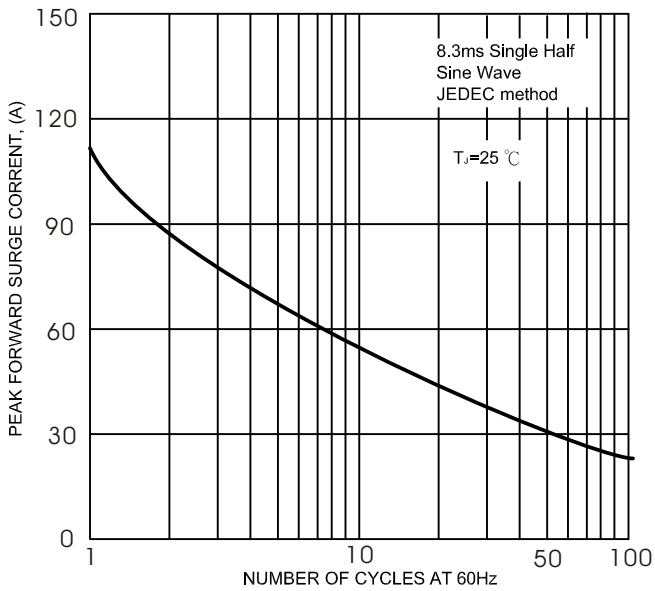


FIG.5- TYPICAL REVERSE CHARACTERISTICS

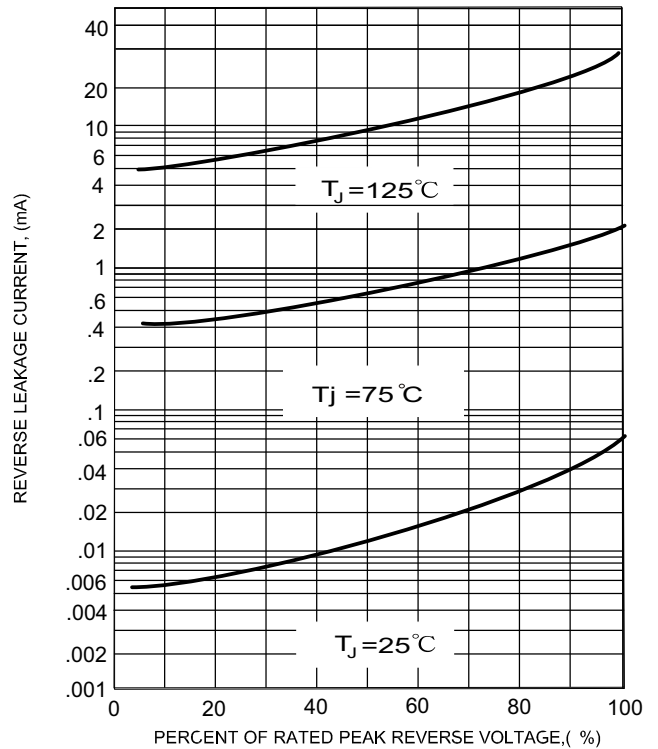


FIG.4- TYPICAL JUNCTION CAPACITANCE

