

# SRL1020 THUR SRL1040

## SCHOTTKY BARRIER RECTIFIERS

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

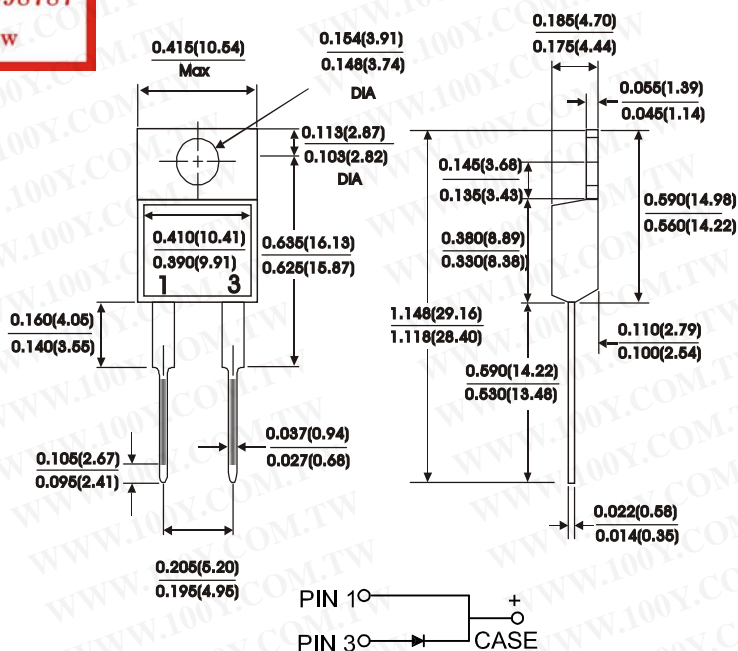
### FEATURES:

- 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 TO-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

### TO-220 AC



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	SRL1020	SRL1030	SRL1040	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 $T_c=105^\circ\text{C}$	$I_{(AV)}$	10			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200			Amps
Maximum instantaneous forward voltage (NOTE 2) $IF=10\text{ A}$	$V_F$	0.55			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_c=25^\circ\text{C}$ $T_c=100^\circ\text{C}$	$I_R$	1.0 50			mA
Typical thermal resistance (NOTE 1)	$R_{th-JC}$	2.0			$^\circ\text{C}/\text{W}$
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

# RATINGS AND CHARACTERISTIC CURVES SRL1020 THRU SRL1040

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

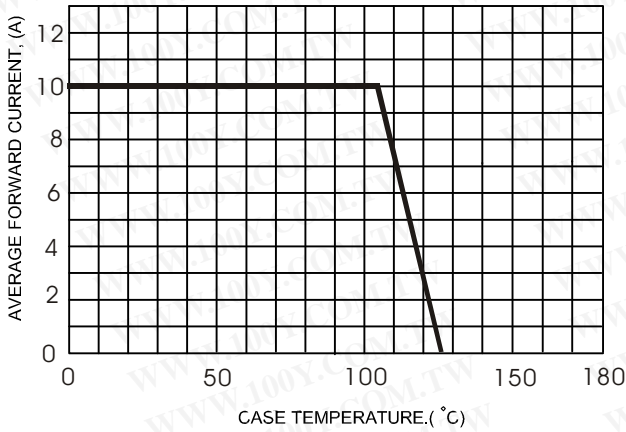
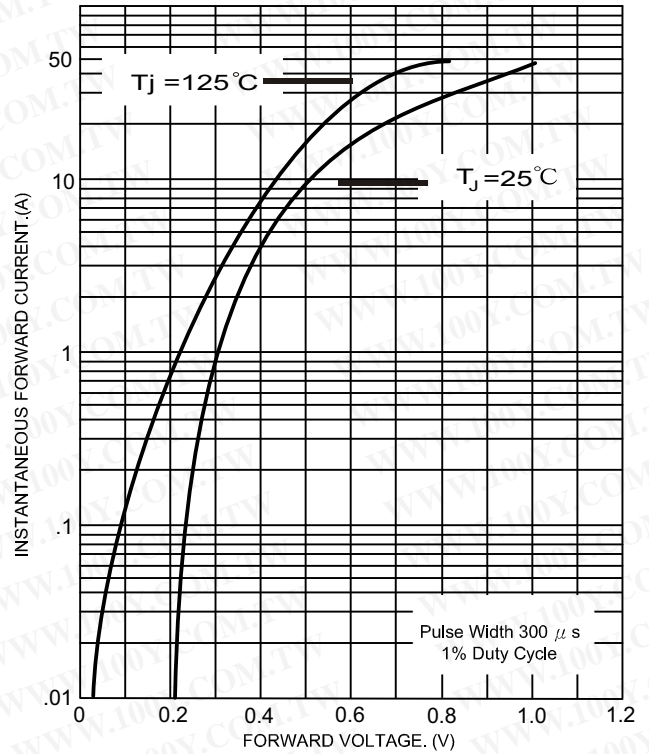


FIG.2 - TYPICAL FORWARD CHARACTERISTICS



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FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

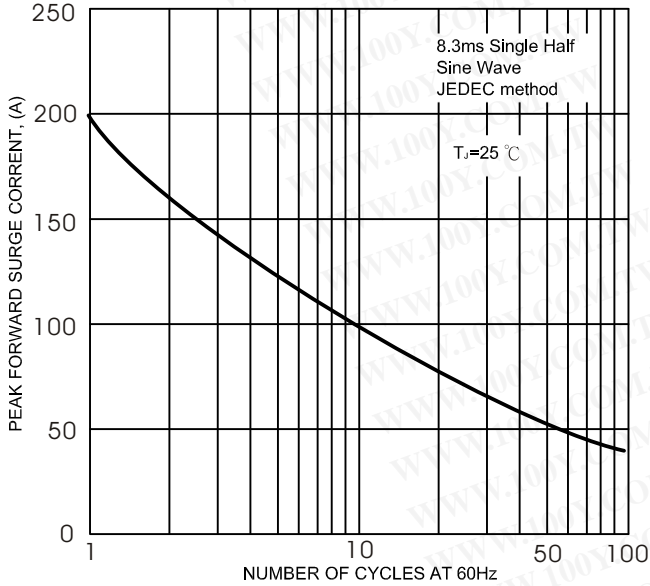


FIG.5- TYPICAL REVERSE CHARACTERISTICS

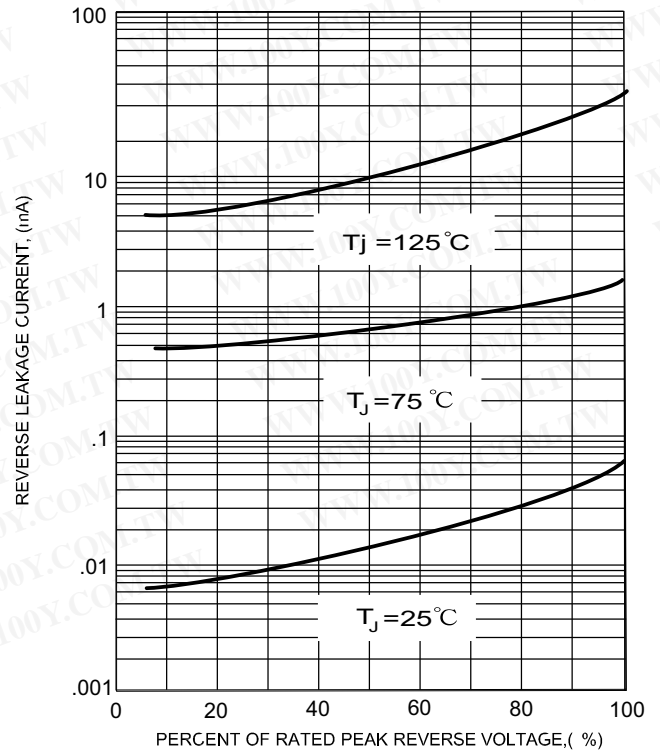


FIG.4- TYPICAL JUNCTION CAPACITANCE

