

# SR1090CT THUR SR10100CT

## 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)

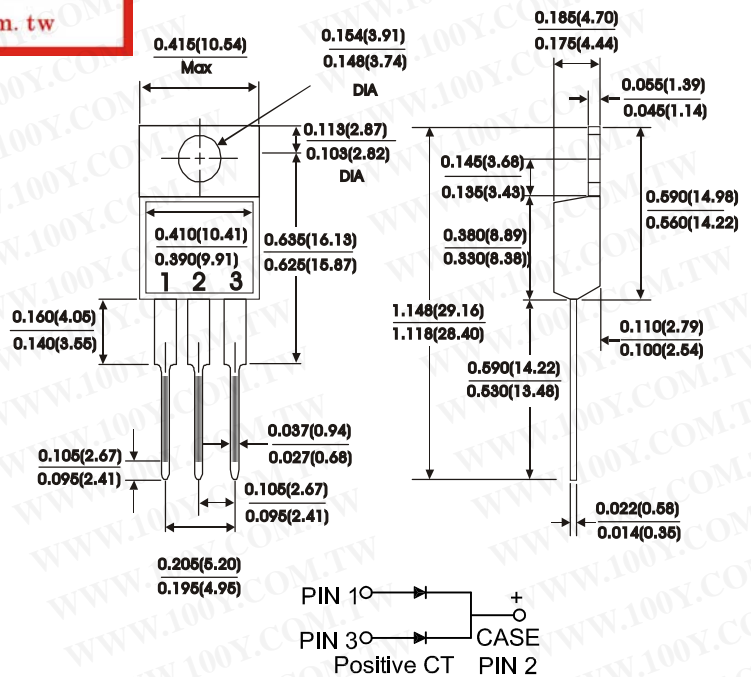
### FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- 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 Postition : Any  
 Mounting Torque 5 in - lbs. max  
 Weight : 0.08 ounce, 2.24 grams

### TO-220 AB



### 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	SR1090CT	SR10100CT	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 $T_C=125^\circ C$	$I_o$	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)	$V_F$	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2)	$I_R$	0.5 50.0		mA
Typical thermal resistance (Per leg)(NOTE 1)	$R_{th-JC}$	3.0		°C/W
Operating temperature range	$T_J$	-65to +150		°C
Storage temperature range	$T_{Stg}$	-65to +150		°C

NOTES:  
 (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle  
 (3) Marking :  $\frac{SR1090CT}{Symbol} = \frac{SR1090}{Marking}$  (Without Marking "CT")

# RATINGS AND CHARACTERISTIC CURVES SR1090CT THRU SR10100CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

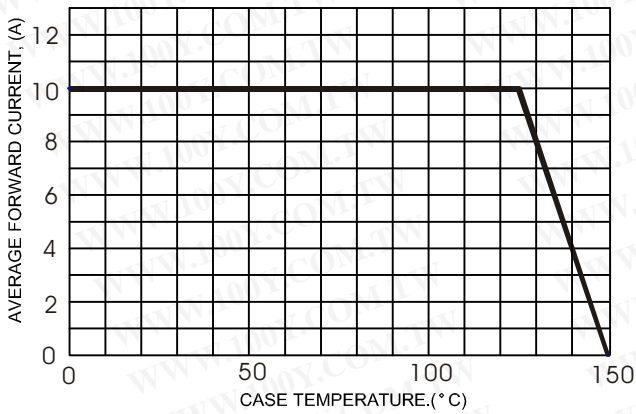


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

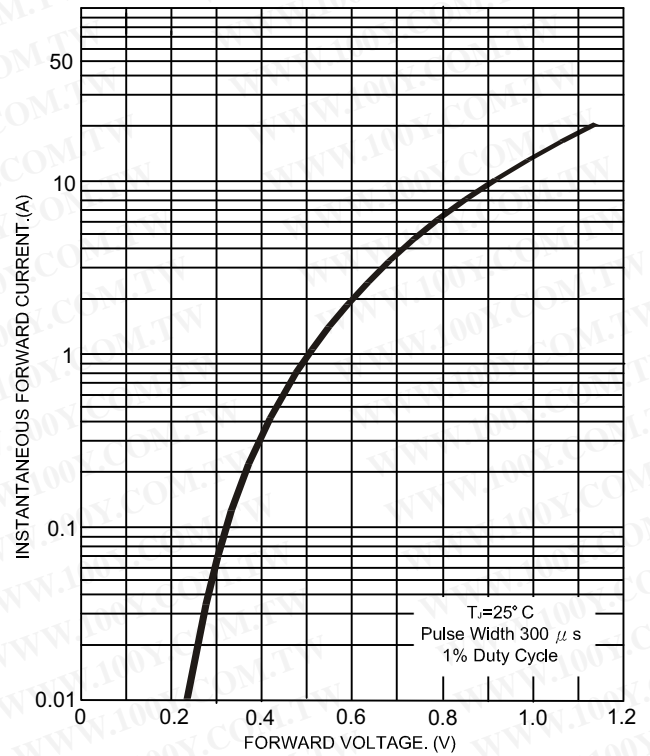
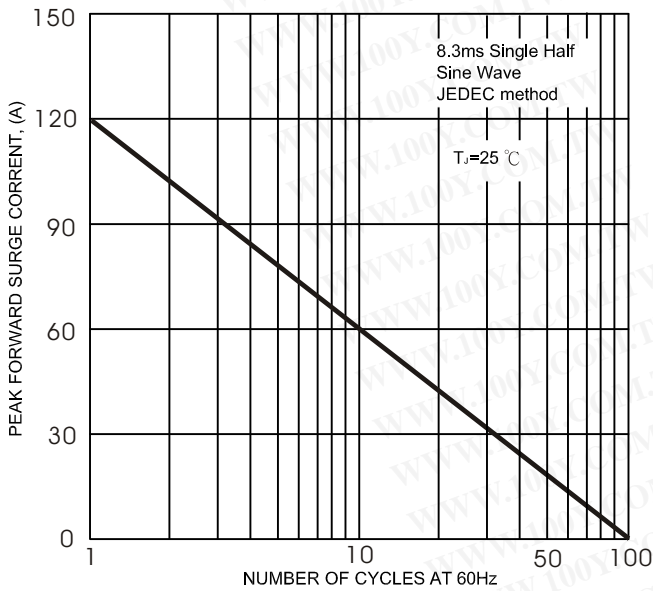


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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FIG.5- TYPICAL REVERSE CHARACTERISTICS

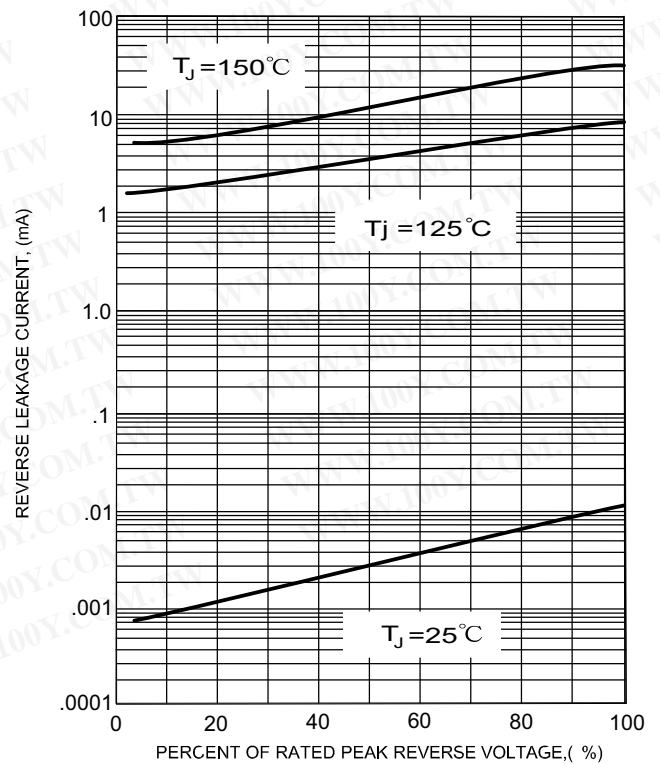


FIG.4- TYPICAL JUNCTION CAPACITANCE

