

# SR10H90CT THUR SR10H100CT

## SCHOTTKY BARRIER RECTIFIERS

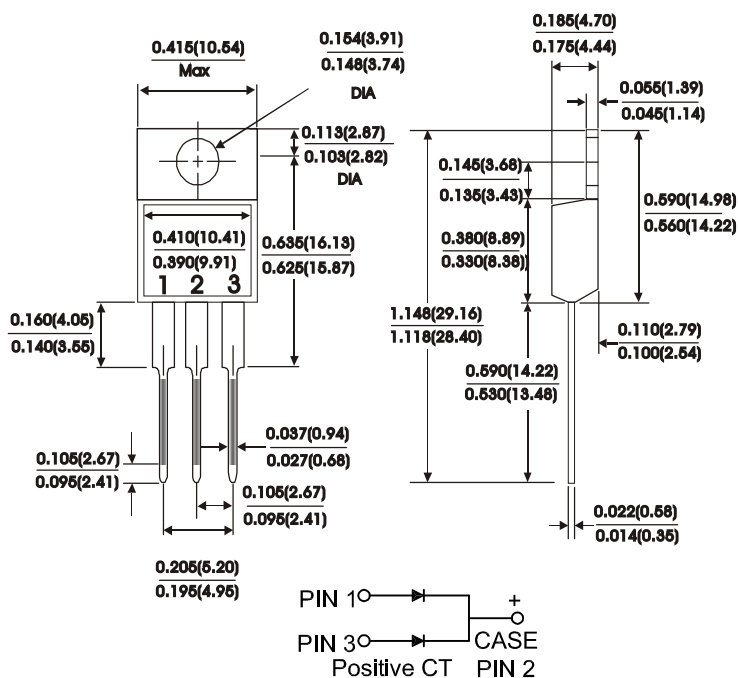
### TO-220 AB

#### 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	SR10H90CT	SR10H100CT	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 $T_c = 150^\circ C$	$I_O$	10		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	$I_{FSM}$	150		Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 5.0A$	$V_F$	0.76		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_c = 25^\circ C$ $T_c = 125^\circ C$	$I_R$	50 10		$\mu A$ mA
Typical thermal resistance (Per leg)(NOTE 1)	$R_{th-JC}$	2.2		$^\circ C/W$
Operating temperature range	$T_J$	-65to +175		$^\circ C$
Storage temperature range	$T_{Stg}$	-65to +175		$^\circ C$

NOTES:  
 (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle  
 (3) Marking : SR10H90CT = SR10H90 (Without Marking "CT")  
                   Symbol            Marking

# RATINGS AND CHARACTERISTIC CURVES SR10H90CT THRU SR10H100CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

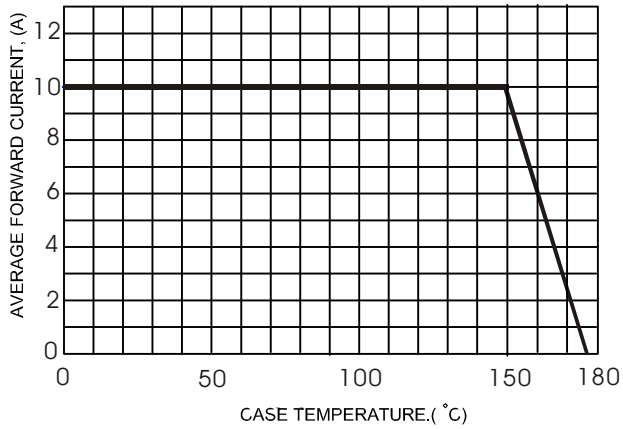


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

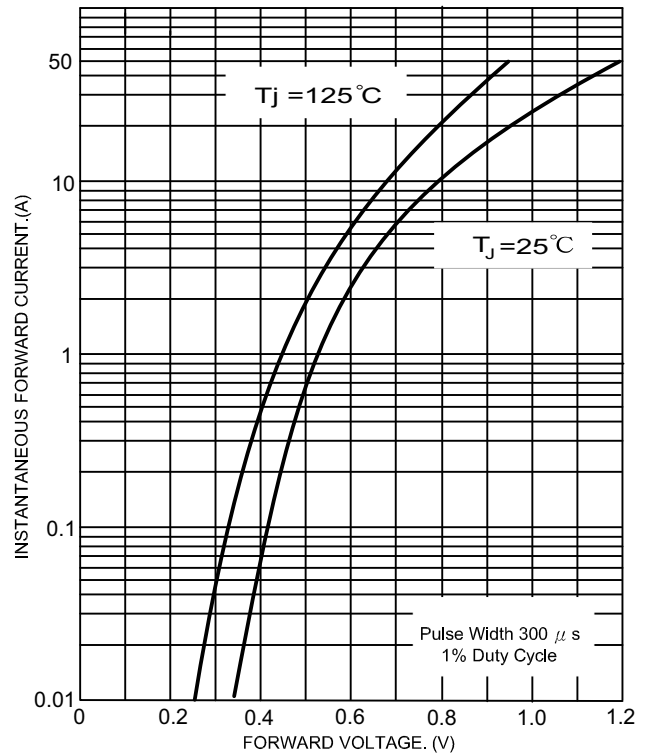


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

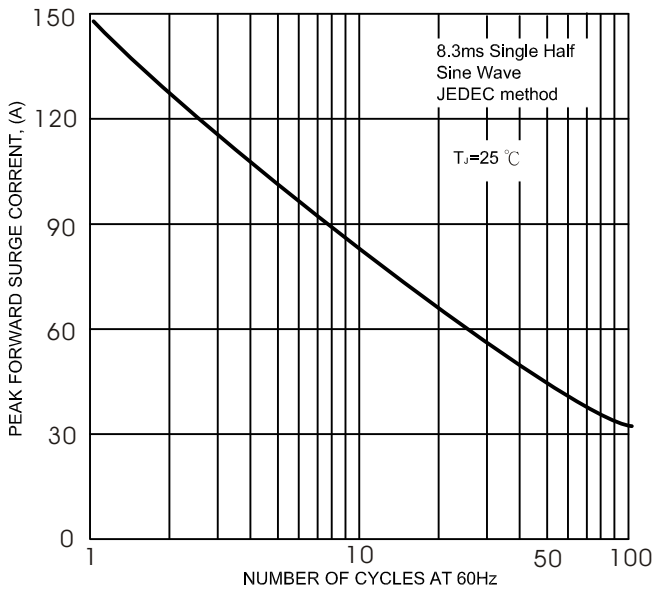


FIG.5- TYPICAL REVERSE CHARACTERISTICS

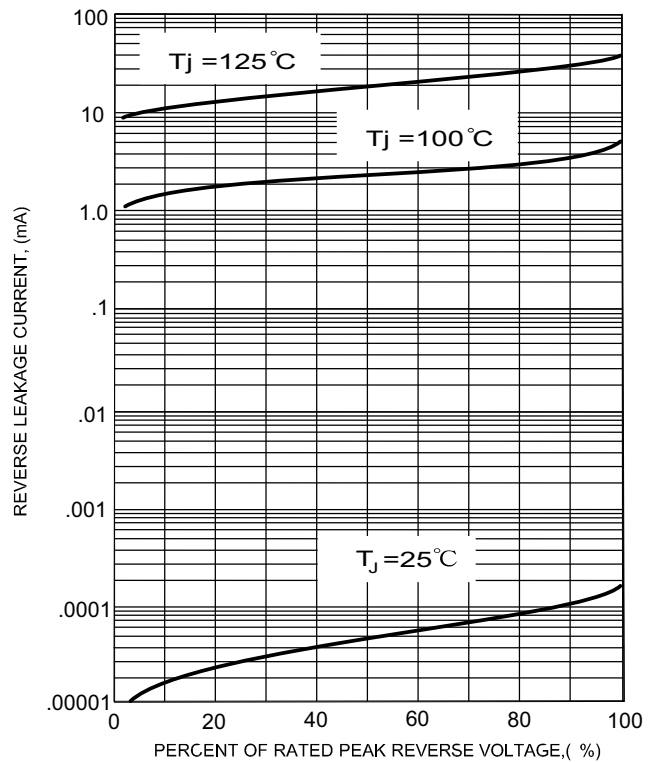


FIG.4- TYPICAL JUNCTION CAPACITANCE

