

# SR1620CT      THUR      SR1660CT

## SCHOTTKY BARRIER RECTIFIERS

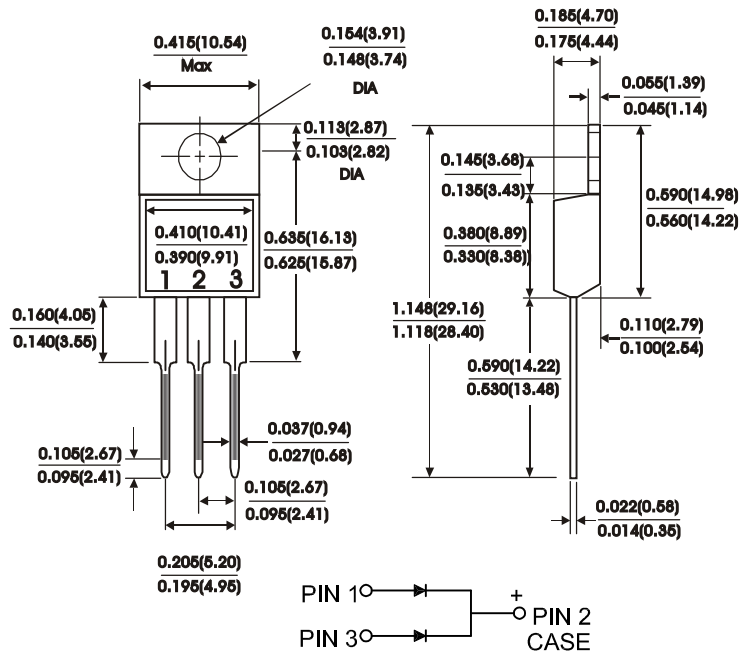
### TO-220 AB

#### 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	SR 1620CT	SR 1630CT	SR 1635CT	SR 1640CT	SR 1645CT	SR 1650CT	SR 1660CT	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 $T_c = 125^\circ\text{C}$	$I_{(AV)}$	16							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) $I_F = 8.0\text{A}$	$V_F$	0.63					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		mA
Typical thermal resistance (Per leg)(NOTE 1)	$R_{th-JC}$	2.0							$^\circ\text{C}/\text{W}$	
Operating temperature range	$T_J$	-40to+150							$^\circ\text{C}$	
Storage temperature range	$T_{Stg}$	-40to+175							$^\circ\text{C}$	

NOTES:  
 (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1% duty cycle  
 (3) Marking : SR1620CT = SR1620 (Without Marking "CT")  
                   Symbol      Marking

# RATINGS AND CHARACTERISTIC CURVES SR1620CT THRU SR1660CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

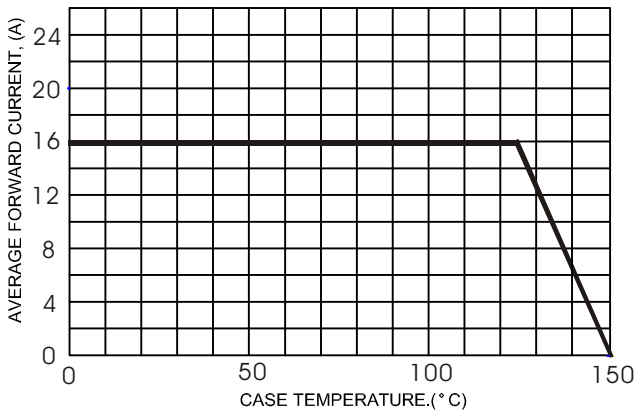


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

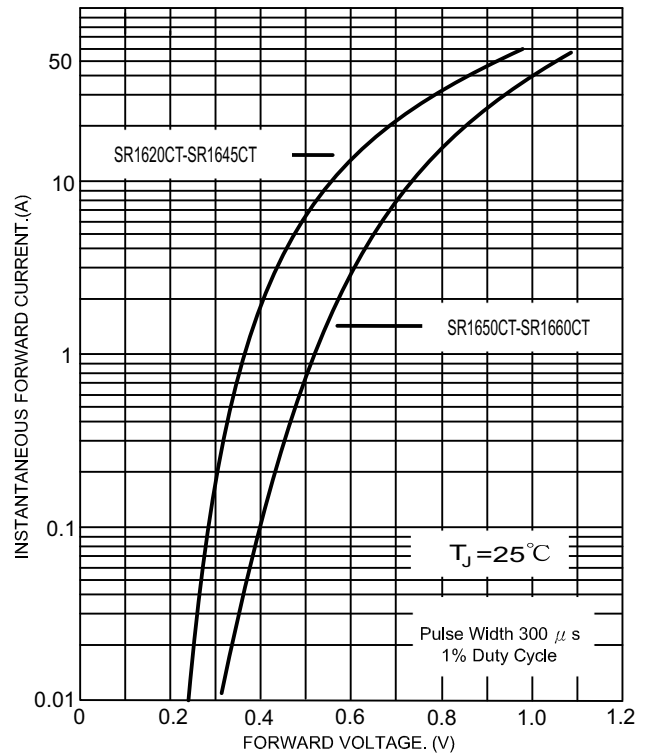


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

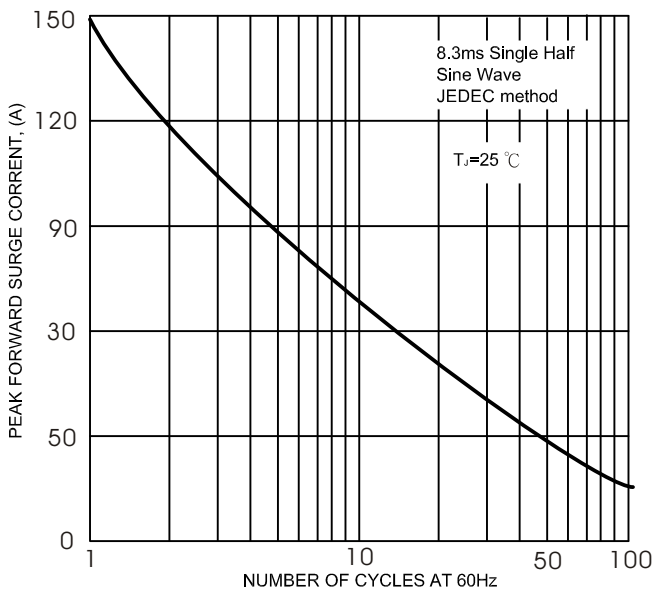


FIG.5- TYPICAL REVERSE CHARACTERISTICS

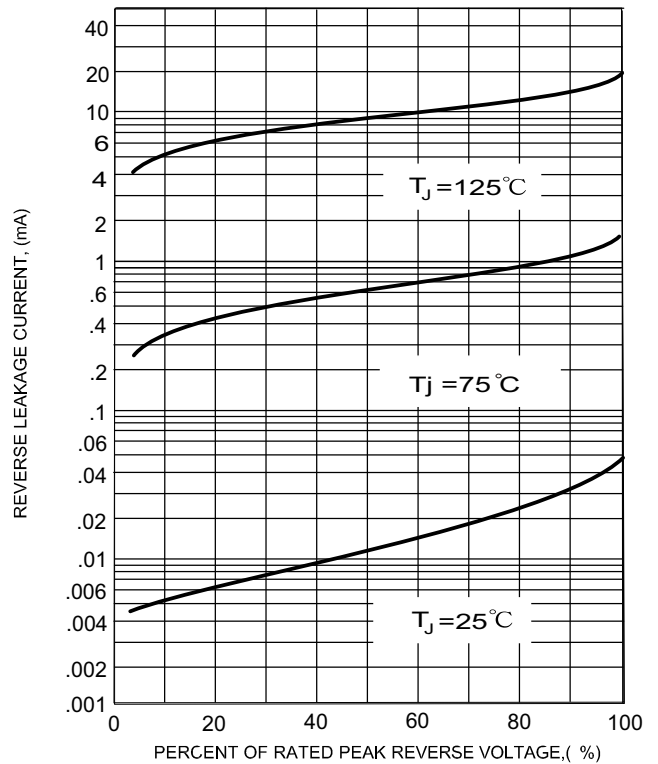


FIG.4- TYPICAL JUNCTION CAPACITANCE

