SR2090CT THUR SR20100CT

SCHOTTKY BARRIER RECTIFIERS

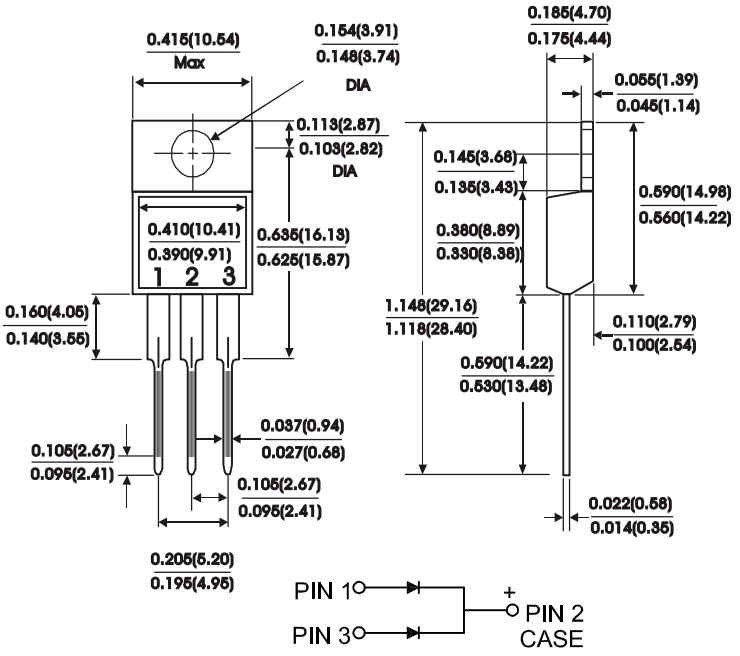
FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250℃/10 seconds, 0.25"(6.35mm) from case

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
Teminals : 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

TO-220 AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 ℃ ambient temperature unless otherwise specified.
Single phase half wave, 60 Hz resistive or inductive load.
For capacitive load. derate current by 20%.

Characteristic	Symbol	SR2090CT	SR20100CT	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 TC=125℃ (Per Pak)	$I_{(AV)}$	20		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) IF=10A	V_F	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) TC=25℃ / TC=125℃	I_R	0.5 / 50		mA
Typical thermal resistance (Per leg)(NOTE 1)	R_{th}-JC	2.0		℃/W
Operating temperature range	T_J	-65to+150		℃
Storage temperature range	T_{Stg}	-65to+175		℃

NOTES:
(1)Thermal resistance from junction to case
(2)Pulse test : 300 us pulse width, 1% duty cycle
(3)Marking : SR2090CT (Symbol) = SR2090 (Marking) (Without Marking "CT")

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

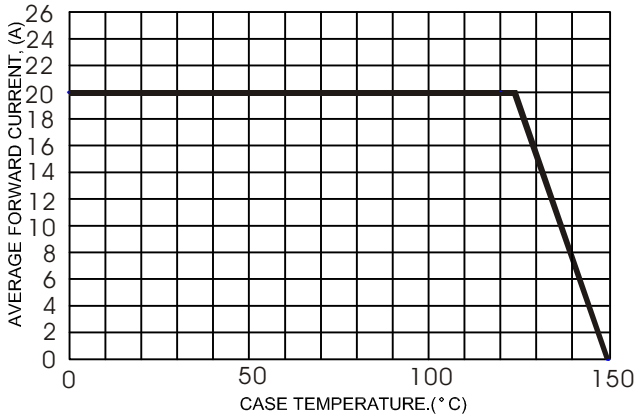


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

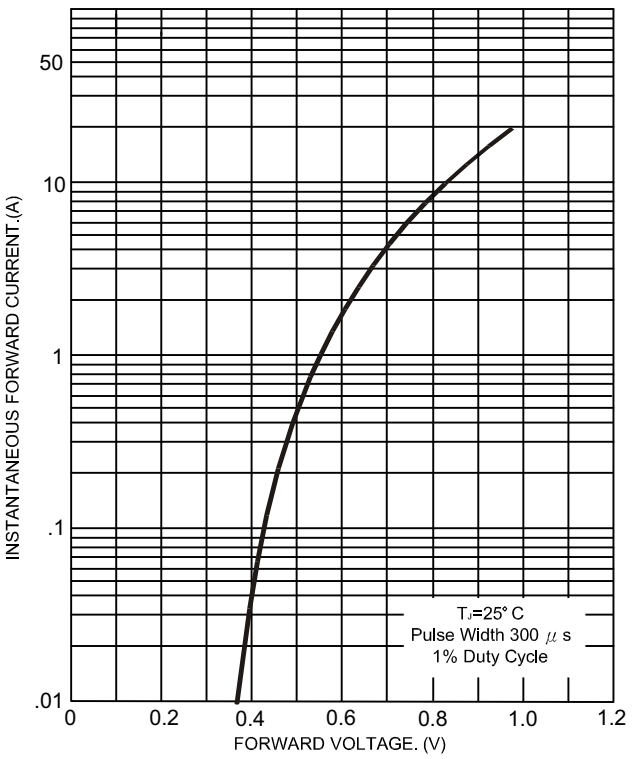


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

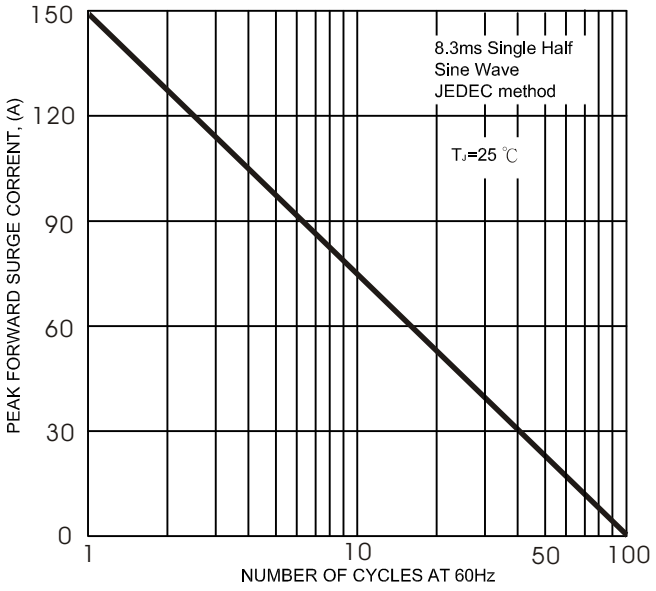


FIG.4- TYPICAL REVERSE CHARACTERISTICS