

# SR3020CT THRU SR30100CT



## 30.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

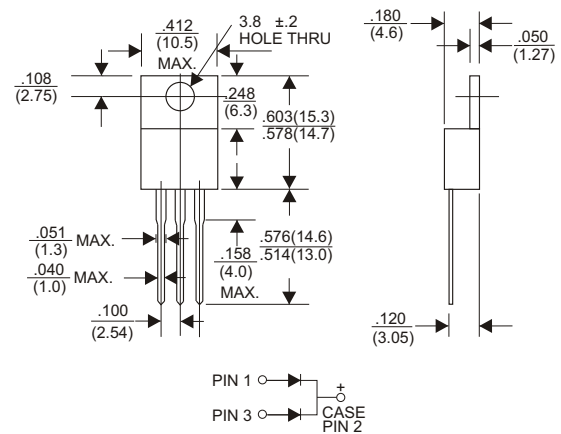
### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

30.0 Amperes

#### TO-220



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SR 3020CT	SR 3030CT	SR 3040CT	SR 3050CT	SR 3060CT	SR 3080CT	SR 30100CT	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current									
at T <sub>c</sub> =95°C								30.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								300	A
Maximum Instantaneous Forward Voltage per Leg at 15A	0.55		0.70		0.85			V	
Maximum DC Reverse Current Ta=25°C								0.5	mA
at Rated DC Blocking Voltage Ta=100°C								50	mA
Typical Junction Capacitance (Note1)								700	pF
Typical Thermal Resistance R <sub>θJC</sub> (Note 2)								2.0	°C/W
Operating Temperature Range T <sub>j</sub>								-65 — +150	°C
Storage Temperature Range T <sub>stg</sub>								-65 — +150	°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (SR3020CT THRU SR30100CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

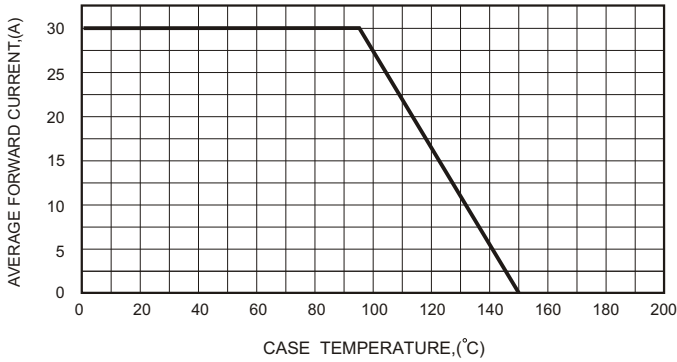


FIG.2-TYPICAL FORWARD CHARACTERISTICS

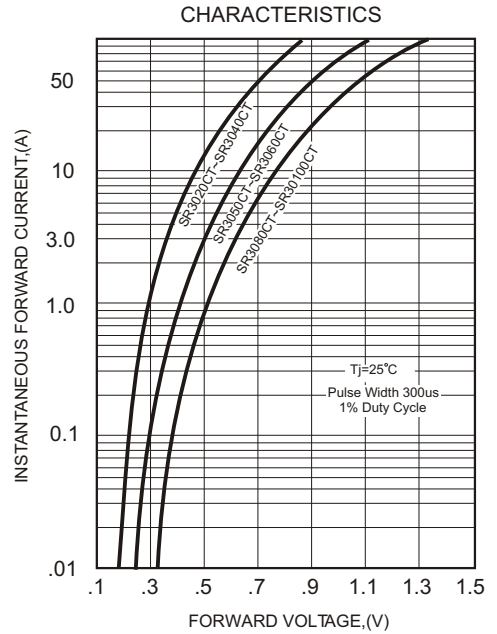


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

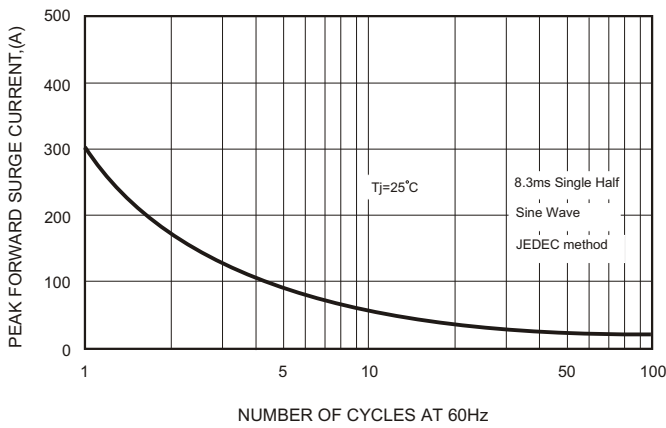


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

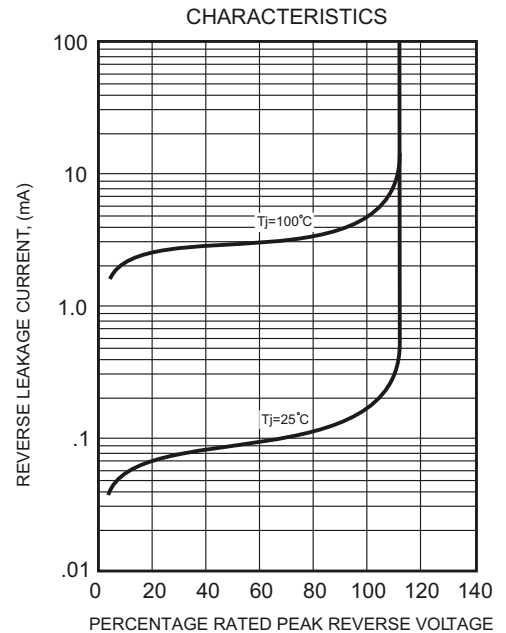


FIG.4-TYPICAL JUNCTION CAPACITANCE

