

# SRF1020CT THRU SRF10100CT



## 10.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

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

### MECHANICAL DATA

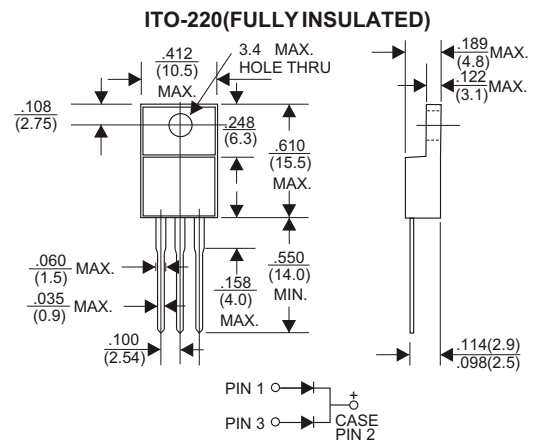
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

10.0 Amperes



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	SRF 1020CT	SRF 1030CT	SRF 1040CT	SRF 1050CT	SRF 1060CT	SRF 1080CT	SRF 10100CT	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								10.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								150	A
Maximum Instantaneous Forward Voltage at 5.0A	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)								380	pF
Typical Thermal Resistance R <sub>JC</sub> (Note 2)								3.0	°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 (SRF1020CT THRU SRF10100CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

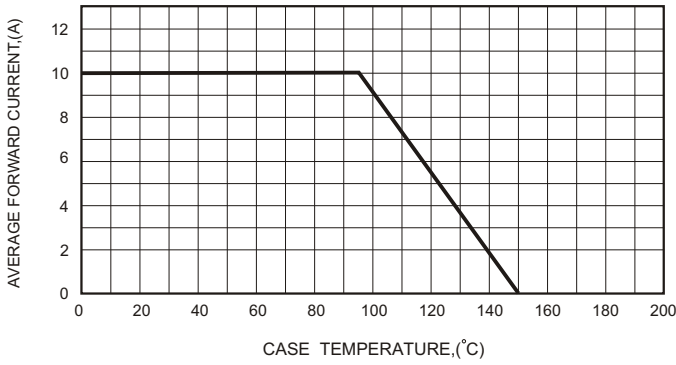


FIG.2-TYPICAL FORWARD CHARACTERISTICS

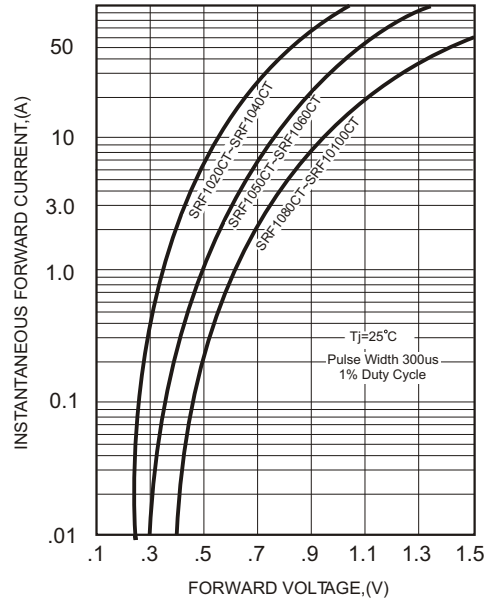


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

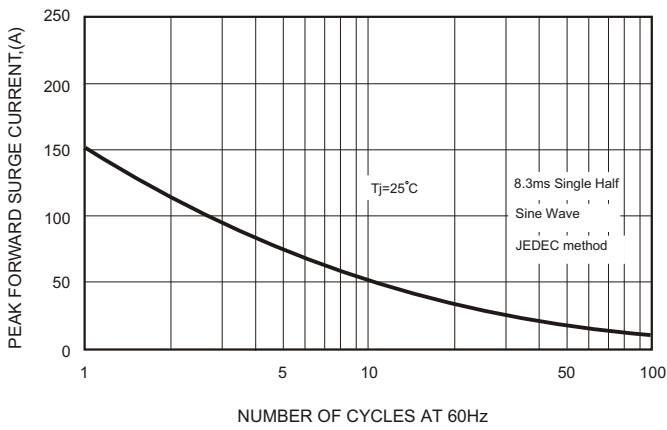


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

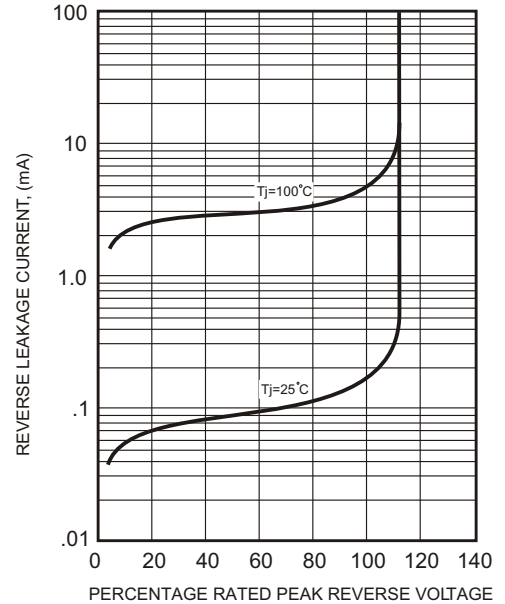


FIG.4-TYPICAL JUNCTION CAPACITANCE

