

# SRF1620CT THRU SRF16100CT



## 16.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

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

### MECHANICAL DATA

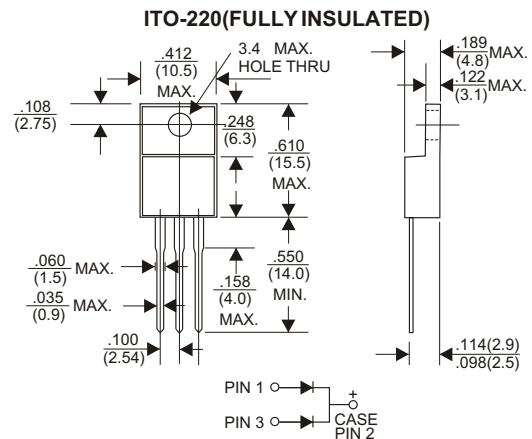
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

### VOLTAGE RANGE

20 to 100 Volts

### CURRENT

16.0 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 1620CT	SRF 1630CT	SRF 1640CT	SRF 1650CT	SRF 1660CT	SRF 1680CT	SRF 16100CT	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 Tc=95°C								16.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								150	A
Maximum Instantaneous Forward Voltage per Leg at 8.0A	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 RθJC (Note 2)								2.5	°C/W
Operating Temperature Range Tj								-65 — +150	°C
Storage Temperature Range Tstg								-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 (SRF1620CT THRU SRF16100CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

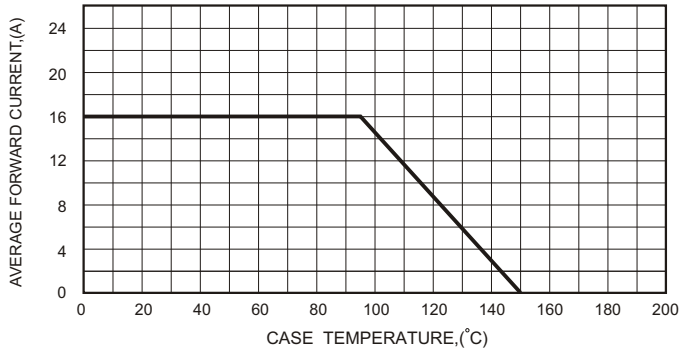


FIG.2-TYPICAL FORWARD CHARACTERISTICS

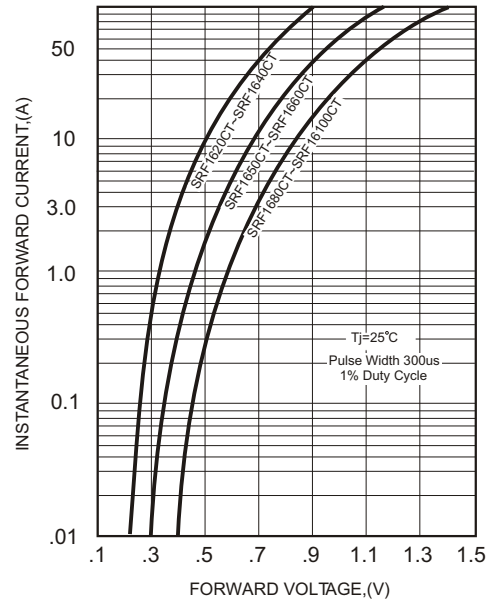


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

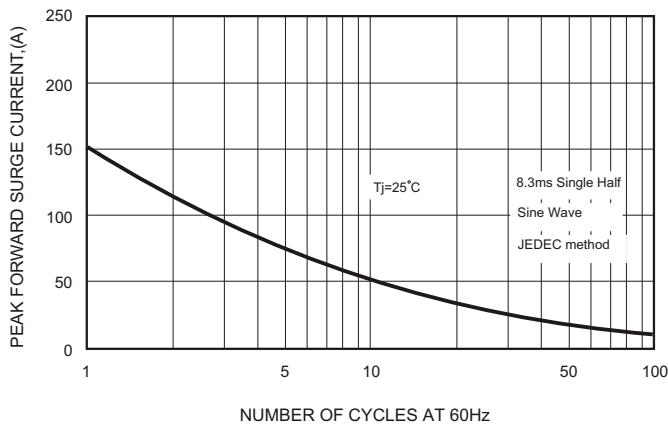


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

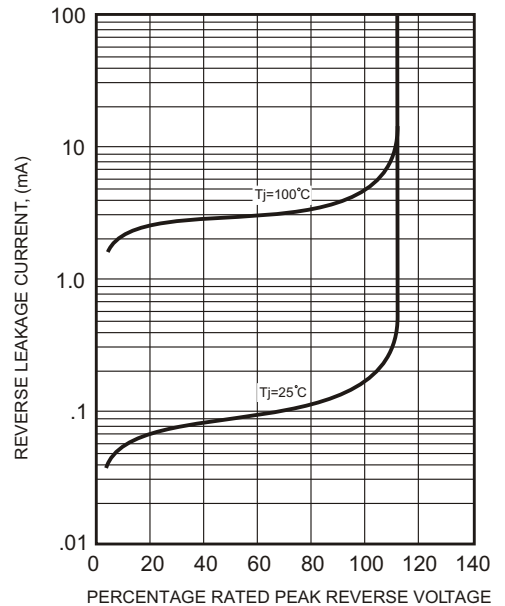


FIG.4-TYPICAL JUNCTION CAPACITANCE

