

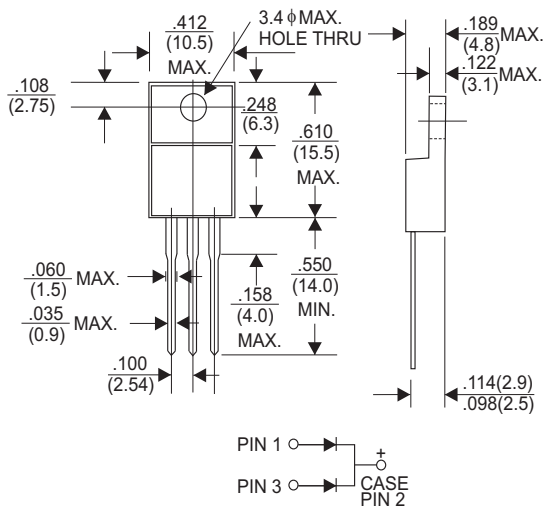


# SRF1620CT THER SRF16200CT

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 200 Volts    Forward Current - 16.0 Ampere

### ITO-220AB (FULLY INSULATED)



Dimensions in inches and (millimeters)

## 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: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

## 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	SRF16 20CT	SRF16 30CT	SRF16 40CT	SRF16 50CT	SRF16 60CT	SRF16 80CT	SRF16 100CT	SRF16 150CT	SRF16 200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	See Fig. 1									A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	16.0									A
Maximum Instantaneous Forward Voltage at 8.0A	0.55		0.70		0.85		0.95			V
Maximum DC Reverse Current Ta=25°C	0.05									mA
at Rated DC Blocking Voltage Ta=100°C	10									mA
Typical Junction Capacitance (Note1)	380									pF
Typical Thermal Resistance RθJA (Note 2)	55				62					°C/W
Operating Temperature Range Tj	-65 — +125			-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 Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES (SRF1620CT THRU SRF16200CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

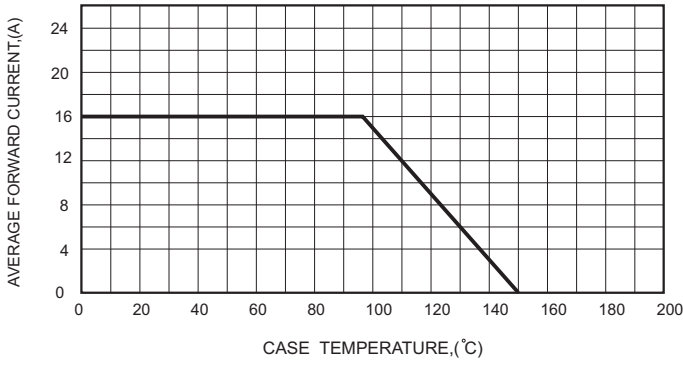


FIG.2-TYPICAL FORWARD CHARACTERISTICS

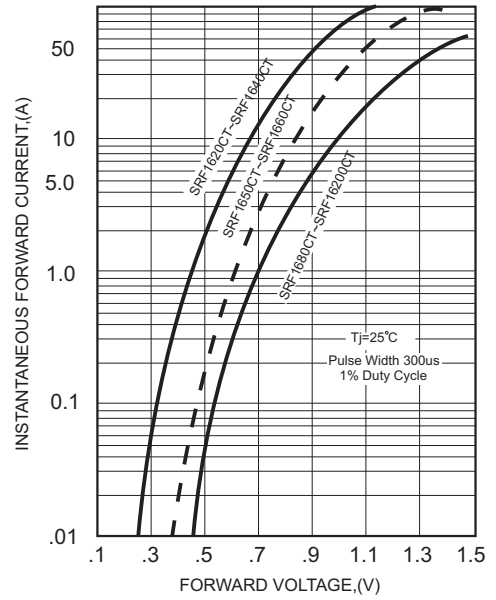


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

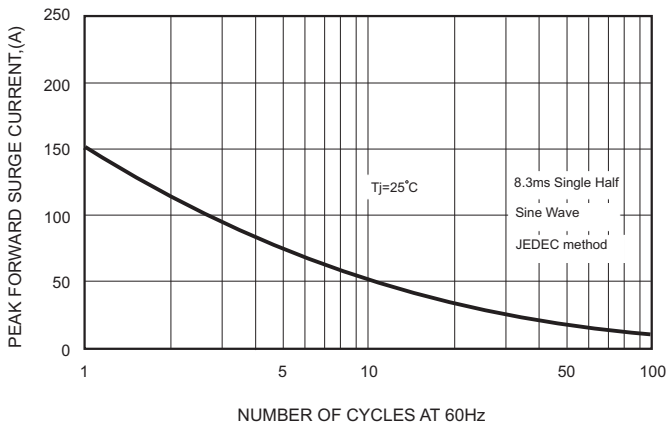


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

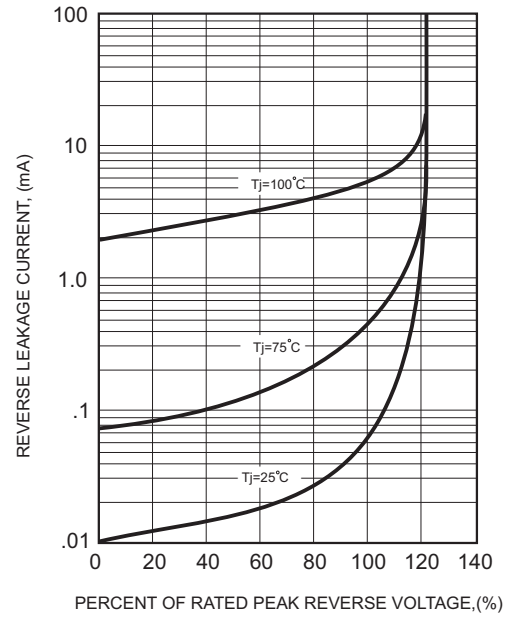


FIG.4-TYPICAL JUNCTION CAPACITANCE

