



# SRF3020CT THRU SRF30200CT

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 20 to 200 Volts      Forward Current - 30.0 Ampere

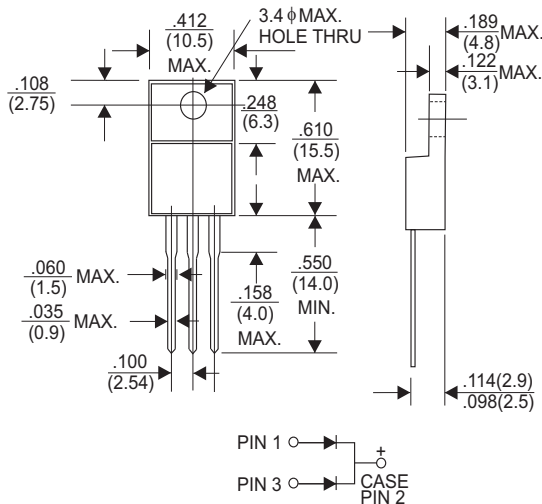
### FEATURES

- \* 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

ITO-220AB (FULLY INSULATED)



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	SRF30 20CT	SRF30 30CT	SRF30 40CT	SRF30 50CT	SRF30 60CT	SRF30 80CT	SRF30 100CT	SRF30 150CT	SRF30 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)	20.0									A	
Maximum Instantaneous Forward Voltage at 15.0A	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 (Note 1)										380	pF
Typical Thermal Resistance RθJA (Note 2)										2.0	°C/W
Operating Temperature Range T <sub>J</sub>	-65 — +125			-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 Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES (SRF3020CT THRU SRF30200CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

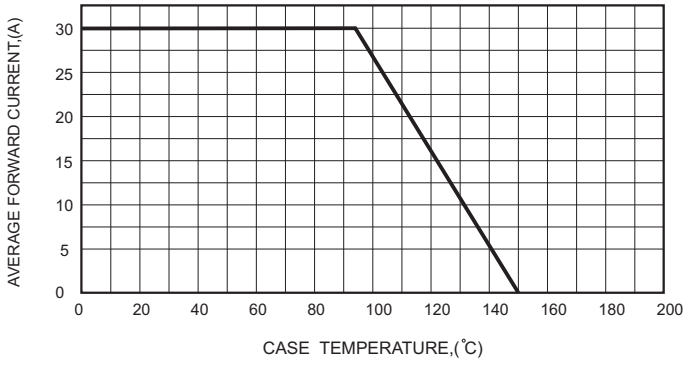


FIG.2-TYPICAL FORWARD CHARACTERISTICS

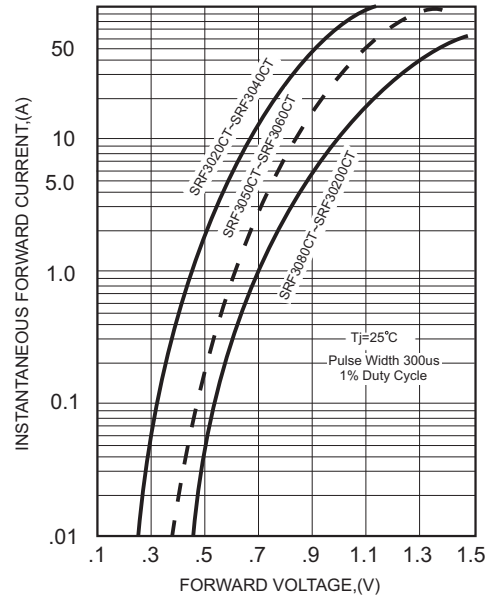


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

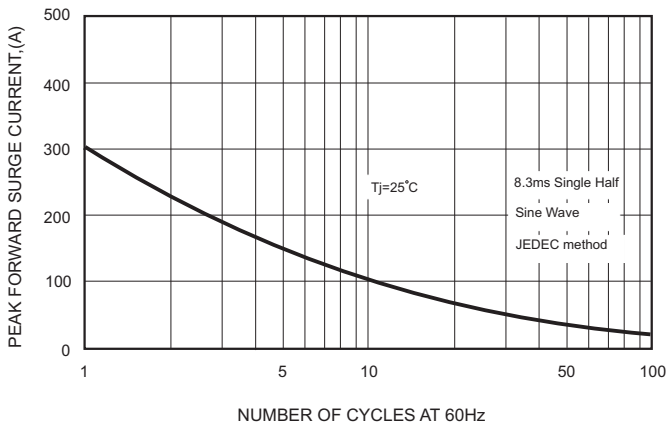


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

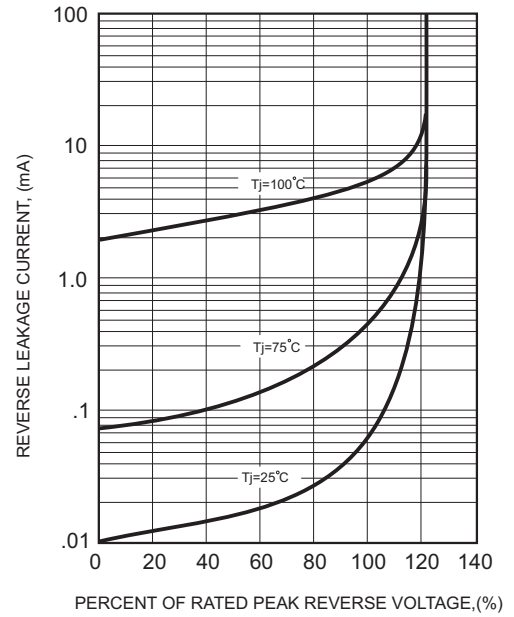


FIG.4-TYPICAL JUNCTION CAPACITANCE

