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 guranteed
* Polarity: As Marked
* Mounting position: Any

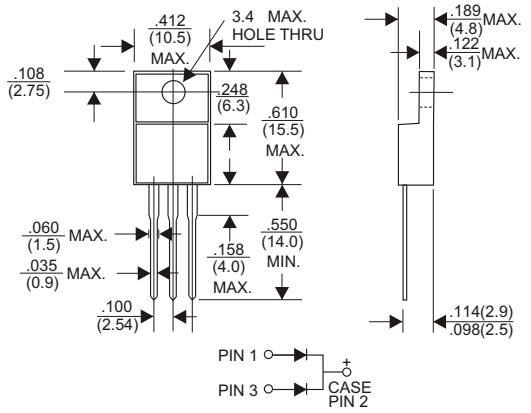
VOLTAGE RANGE

20 to 100 Volts

CURRENT

10.0 Amperes

ITO-220(FULLY INSULATED)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies 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 Tc=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 JC (Note 2)	3.0							°C/W
Operating Temperature Range T_J	-65 — +150							°C
Storage Temperature Range T_{STG}	-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

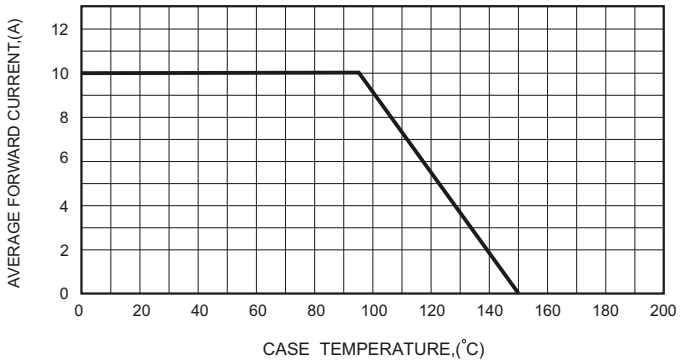


FIG.2-TYPICAL FORWARD CHARACTERISTICS

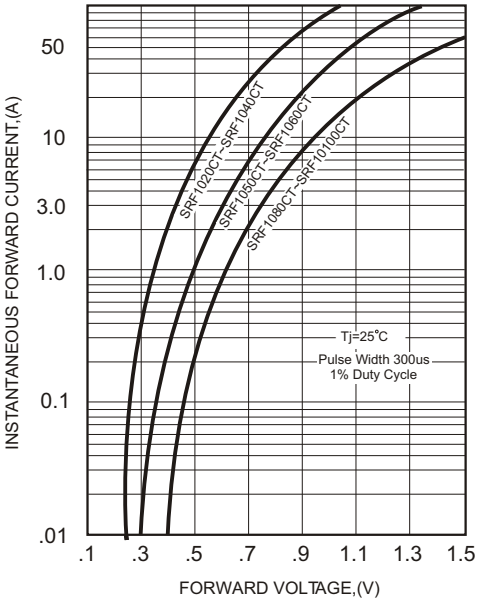


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

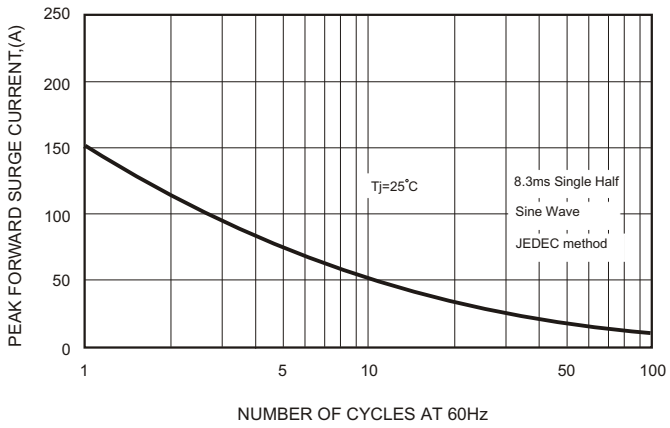


FIG.4-TYPICAL JUNCTION CAPACITANCE

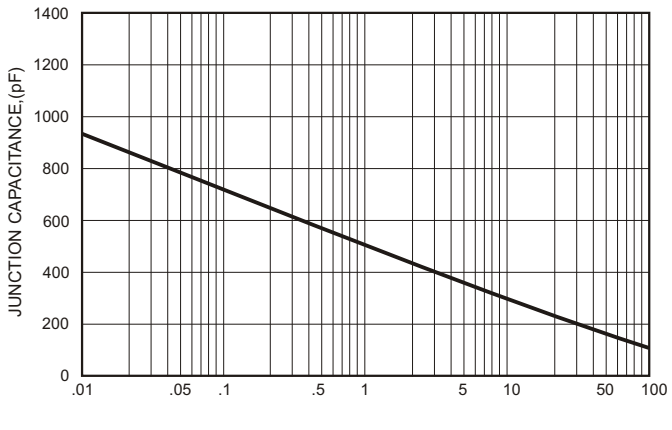


FIG.5 - TYPICAL REVERSE CHARACTERISTICS