SRF3020LCT THRU SRF30100LCT

30.0 AMP LOW VF 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

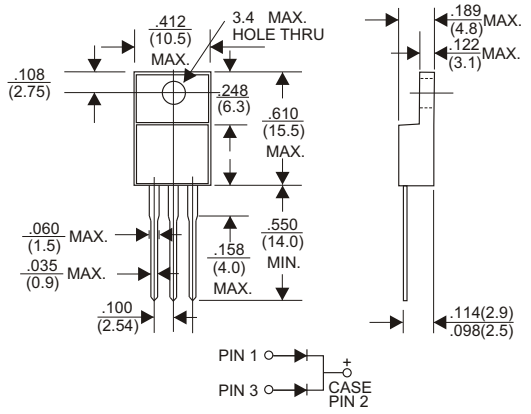
VOLTAGE RANGE

20 to 100 Volts

CURRENT

30.0 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 3020LCT	SRF 3030LCT	SRF 3040LCT	SRF 3050LCT	SRF 3060LCT	SRF 3080LCT	SRF 30100LCT	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	30.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	300							A
Maximum Instantaneous Forward Voltage per Leg at 15A	0.42			0.47		0.65		V
Maximum DC Reverse Current Ta=25°C	0.2							mA
at Rated DC Blocking Voltage Ta=100°C	20							mA
Typical Junction Capacitance (Note1)	1300							pF
Typical Thermal Resistance RθJC (Note 2)	2.0							°C/W
Operating Temperature Range TJ	-65 — +150							°C
Storage Temperature Range TSTG	-65 — +175							°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 (SRF3020LCT THRU SRF30100LCT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

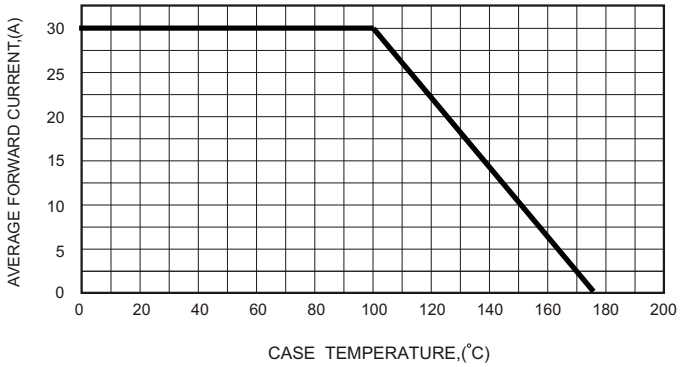


FIG.2-TYPICAL FORWARD CHARACTERISTICS

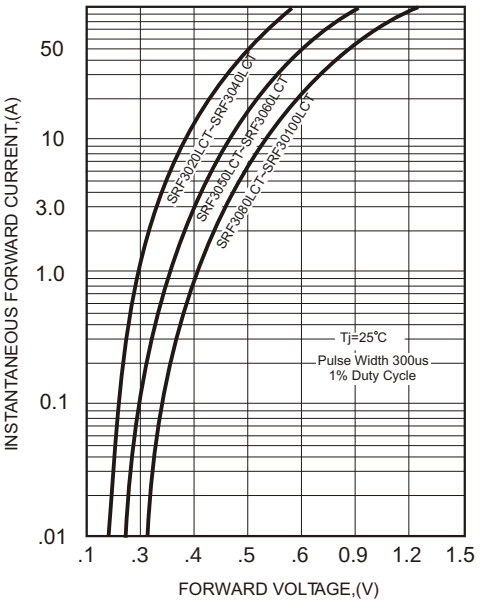


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

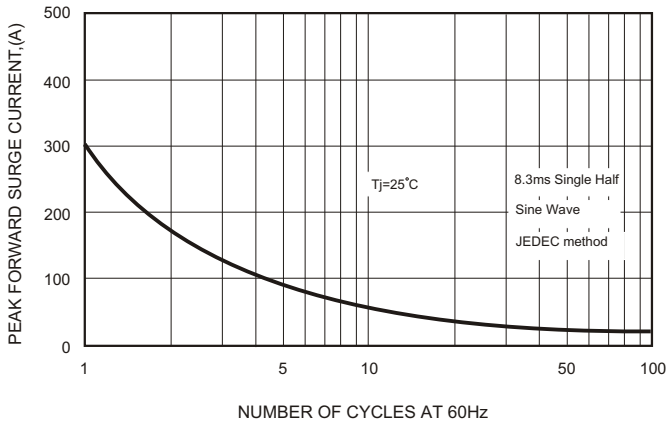


FIG.4-TYPICAL JUNCTION CAPACITANCE

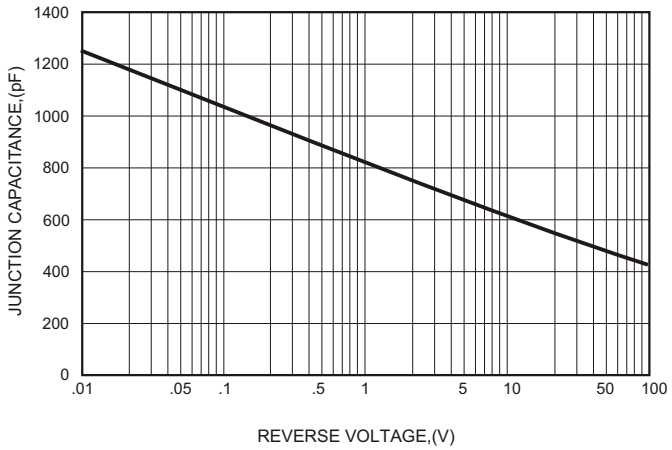


FIG.5 - TYPICAL REVERSE CHARACTERISTICS