

SRF1020 THRU SRF1060



10.0 AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

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

MECHANICAL DATA

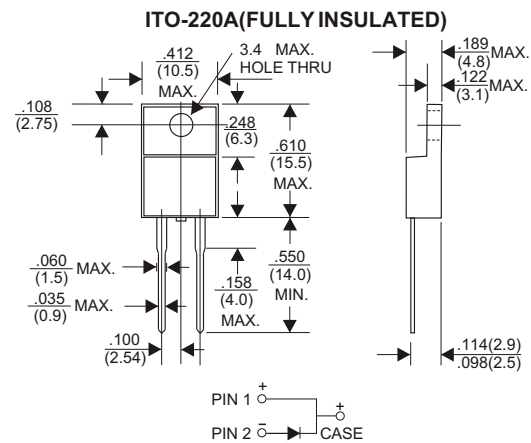
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 1.90 grams

VOLTAGE RANGE

20 to 60 Volts

CURRENT

10.0 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	SRF1020	SRF1030	SRF1035	SRF1040	SRF1045	SRF1050	SRF1060	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	35	40	45	50	60	V
Maximum RMS Voltage	14	21	24	28	31	35	42	V
Maximum DC Blocking Voltage	20	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current at T _c =125°C	10							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 10A	0.55			0.70			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C			5.0			mA	
	Ta=100°C			50			mA	
Typical Junction Capacitance (Note1)	400							pF
Typical Thermal Resistance R _{θJC} (Note 2)	2.5							°C/W
Operating Temperature Range T _J	-65 — +150							°C
Storage Temperature Range T _{STG}	-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 (SRF1020 THRU SRF1060)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

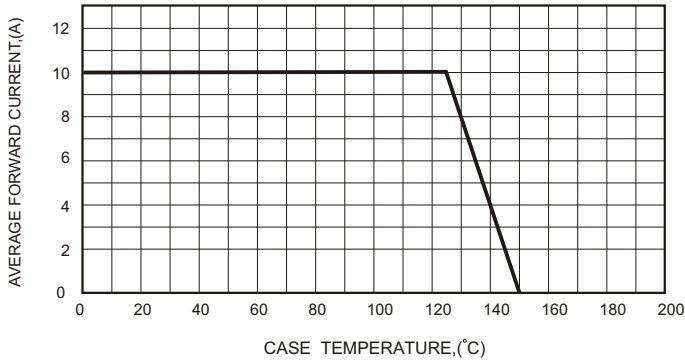


FIG.2-TYPICAL FORWARD CHARACTERISTICS

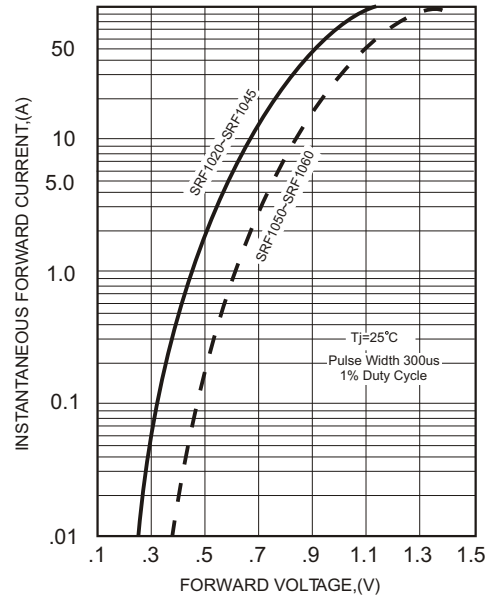


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

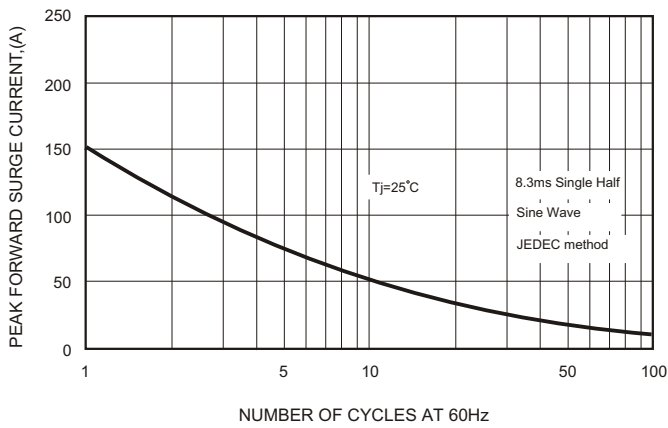


FIG.4-TYPICAL JUNCTION CAPACITANCE

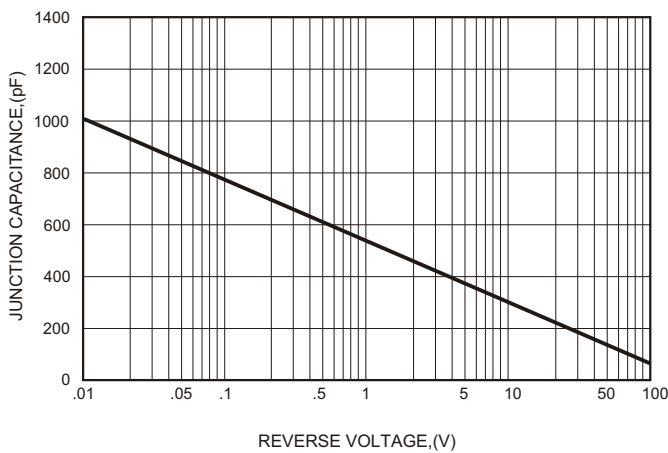


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

