# **SRF1020 THRU SRF1060**

## **SCHOTTKY BARRIER RECTIFIERS**

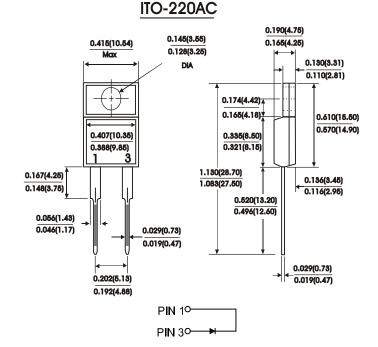
#### **FEATURES:**

- Plastic package Underwriters Laboratory
   Flammability Classification 94V-0
- Metal silicon junction
   Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25"(6.35mm) from case

#### MECHANICAL DATA

Case: JEDEC ITO-220AC molded plastic
Teminals: Leads solderable per Mil-STD-750

Method 2026
Polarity: As marked
Mounting Postition: Any
Mounting Torque 5 in - lbs.max
Weight: 0.08 ounce, 2.24 grams



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase half wave, 60 Hz resistive or inductive load.

For capacitive load, derate current by 20%.

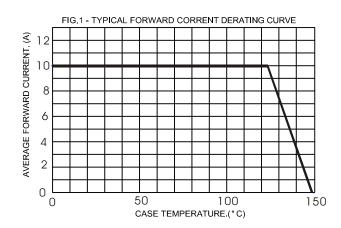
Characteristic	Symbol	SRF1020	SRF1030	SRF1035	SRF1040	SRF1045	SRF1050	SRF1060	Units
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at (See Fig. 1)	I <sub>(AV)</sub>	10						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150						Amps	
Maximum instantaneous forward voltage $IF=10A$ (NOTE 2) $IF=20A$	\/ <sub>F</sub>	0.63 0.80 0.84 0.95					-	Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $ T_{C}=25\% $ $ T_{C}=125\% $		0.5 15.0						mA	
Typical thermal resistance (NOTE 1)	R <sub>th</sub> -JC	4.0						°C/W	
Operating temperature range	Tj	-65to+150						$^{\circ}\mathbb{C}$	
Storage temperature range	TStg	-65to+175						$^{\circ}\mathbb{C}$	

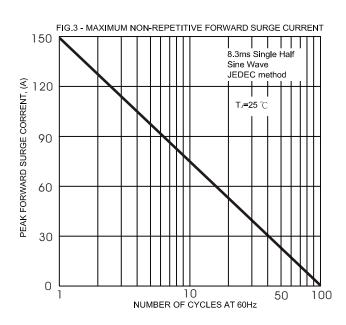
NOTES:

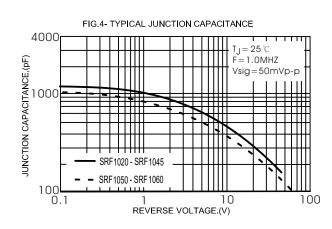
(1)Thermal resistance from junction to case

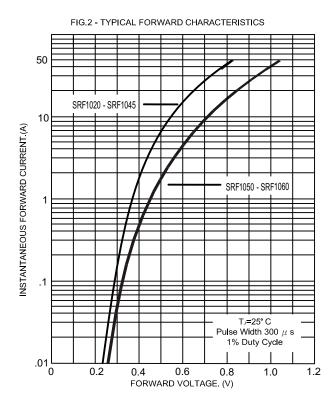
(2) Pulse test: 300 us pulse width, 1% duty cycle

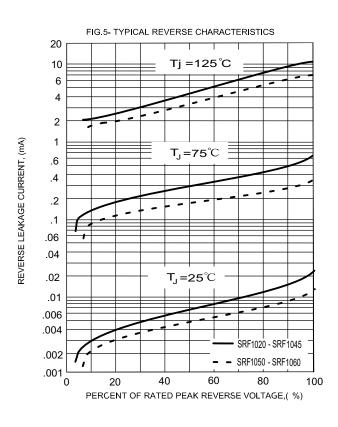
### RATINGS AND CHARACTERISTIC CURVES











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