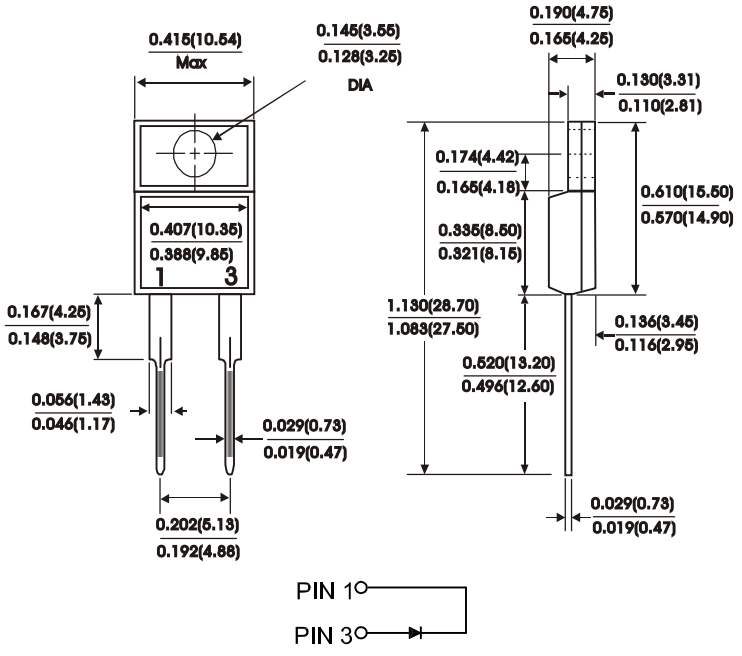
SRF2020 THUR SRF2060

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℃/10 seconds, 0.25"(6.35mm) from case

ITO-220AC



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase half wave, 60 Hz resistive or inductive load.
For capacitive load. derate current by 20%.

Characteristic	Symbol	SRF2020	SRF2030	SRF2035	SRF2040	SRF2045	SRF2050	SRF2060	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	35	40	45	50	60	Volts
Maximum RMS voltage	V_{RMS}	14	21	25	28	32	35	42	Volts
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	50	60	Volts
Maximum average forward rectified current at Tc=125℃	$I_{(AV)}$	20							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							Amps
Maximum instantaneous forward voltage IF=20A (NOTE 2)	V_F	0.65					0.72		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) Tc=25℃ Tc=125℃	I_R	1.0 100							mA
Typical thermal resistance (NOTE 1)	R_{th}-JC	4.0							℃/W
Operating temperature range	T_J	-65to+150							℃
Storage temperature range	T_{Stg}	-65to+175							℃

NOTES:
(1)Thermal resistance from junction to case
(2)Pulse test : 300 us pulse width, 1% duty cycle

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

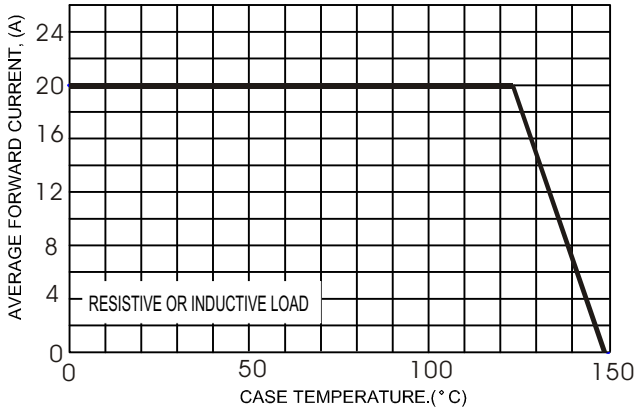


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

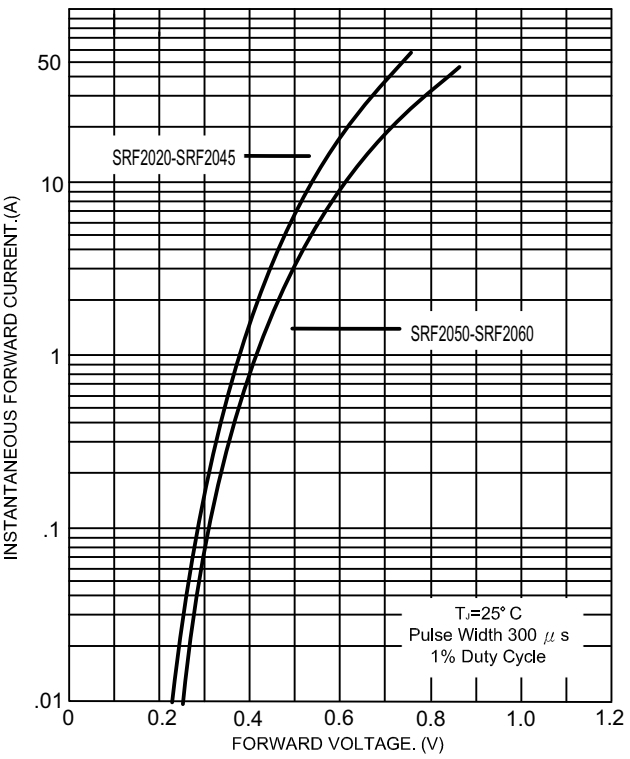


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

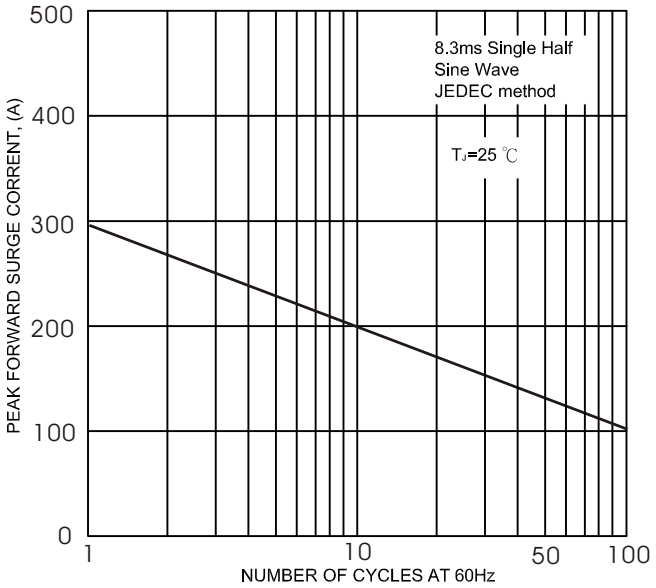


FIG.4- TYPICAL JUNCTION CAPACITANCE

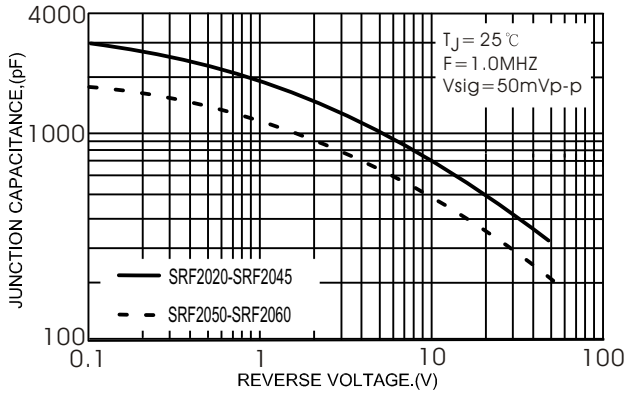


FIG.5- TYPICAL REVERSE CHARACTERISTICS