

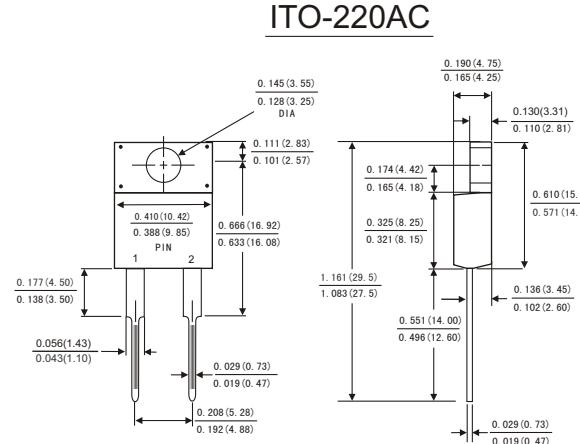
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed:260°C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



MECHANICAL DATA

- Case:** JEDEC ITO-220AC molded plastic body
- Terminals:** Lead solderable per MIL-STD-750,method 2026
- Polarity:** As marked
- Mounting Position:** Any
- Weight:** 0.08ounce, 2.24 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	SRF 620	SRF 630	SRF 640	SRF 650	SRF 660	SRF 680	SRF 6A0	SRF 6150	SRF 6200	Units				
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts				
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	57	71	105	140	Volts				
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts				
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	I _(AV)	6.0								Amps					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated T _J)	I _{FSM}	150.0								Amps					
Maximum instantaneous forward voltage at 6.0 A(atone 1)	V _F	0.60		0.75		0.85		0.90		0.95					
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	0.5								mA					
T _A =25°C		50		25											
Typical junction capacitance(Note 3)	C _J	500		400											
Typical thermal resistance (Note 2)	R _{θJA} R _{θJL}	25.0 8.0								°C/W					
Operating junction temperature range	T _J	-65 to +125		-65 to +150											
Storage temperature range	T _{STG}	-65 to +150								°C					

Notes: 1.Pulse test: 300 μ s pulse width, 1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted , 0.375"(9.5mm)lead length

3.Measured at 1MHz and reverse voltage of 4.0volts

RATINGS AND CHARACTERISTIC CURVES SRF620 THRU SRF6200(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

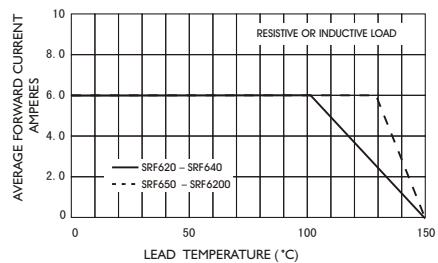


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

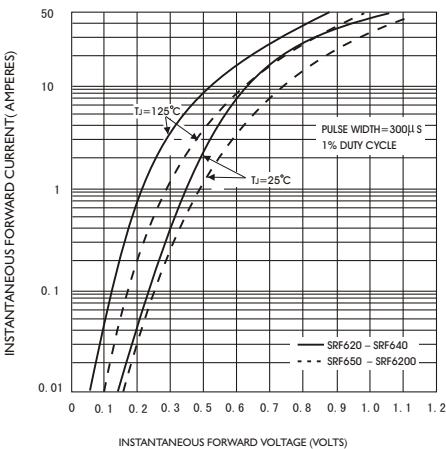


FIG.5-TYPICAL JUNCTION CAPACITANCE

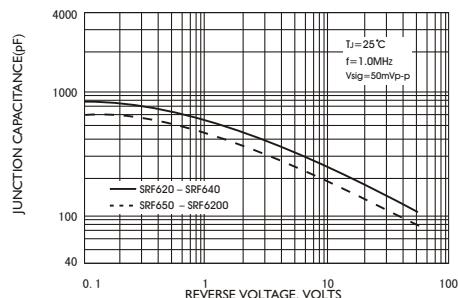


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

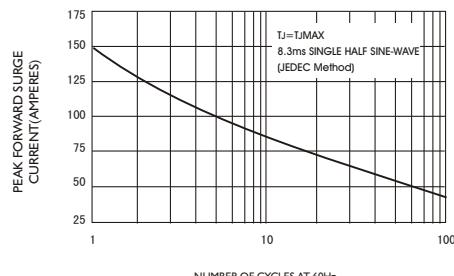


FIG.4-TYPICAL REVERSE CHARACTERISTICS

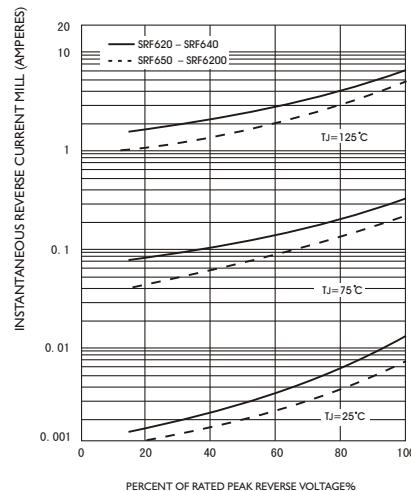


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

