



CHENYI ELECTRONICS

SRF820 THRU SRF8A0(SINGLE CHIP)

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts

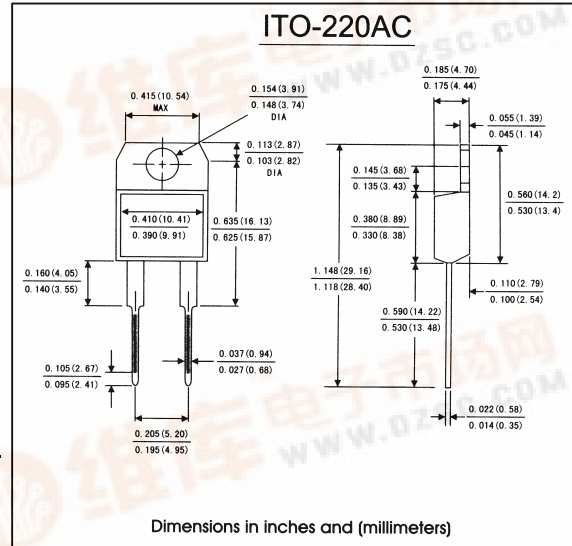
Forward Current - 8.0Amperes

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: 250°C/10 seconds
- 0.25"(6.35mm)from case

MECHANICAL DATA

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



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	SRF820	SRF830	SRF840	SRF850	SRF860	SRF880	SRF8A0	Units
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	57	71	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Macimum average forward rectified current(see Fig.1)	I _(AV)	8.0							Amps
Repetitive peak forward current(square wavr, 20KHz) at Tc=105°C	I _{FRM}	16.0							Amps
Peak forward surge current 8.3ms singel half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150.0							Amps
Maximum instantaneous forward voltage at 7.5 A(Note 1)	V _F	0.65		0.75		0.8	0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I _R	1.0							mA
		15			50				
Typeical thermal resistance(Note 2)	R θ _{JC}	5.0							°C/W
Operating junction temperature range	T _J	-65 to +125			-65 to +150				°C
Storage temperature range	T _{STG}	-65 to +150							°C

Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle
2. Thermal resistance from junction to case



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RATINGS AND CHARACTERISTIC CURVES SRF820 THRU SRF8A0(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

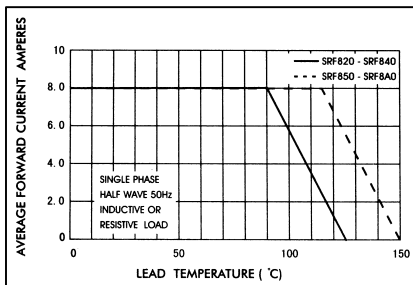


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

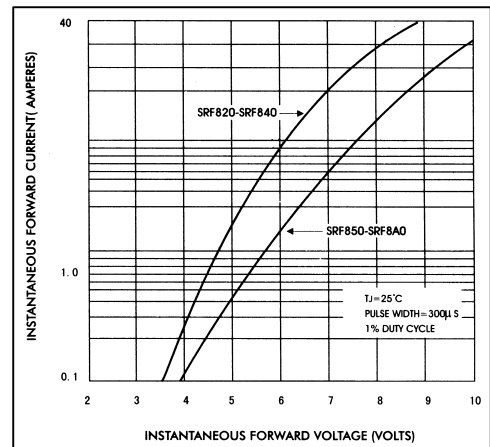


FIG.4-TYPICAL JUNCTION CAPACITANCE

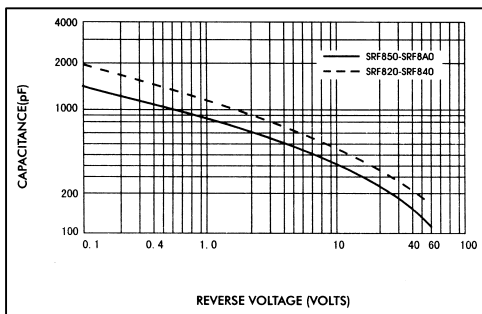


FIG.3-TYPICAL REVERSE CHARACTERISTICS

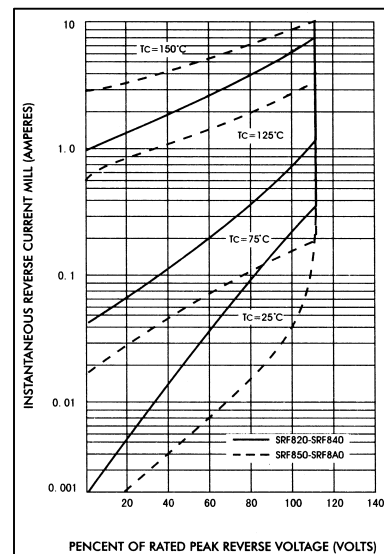


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

