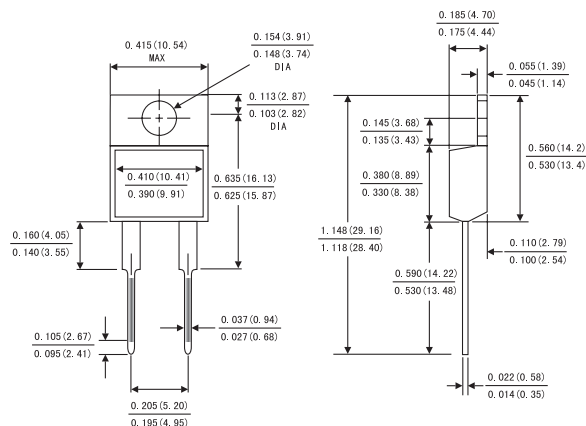


FEATURES

- 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 TO-220AC molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 grams



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	SR 820	SR 830	SR 840	SR 850	SR 860	SR 880	SR 8A0	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	80	100	Volts
Maximum RMS voltage		VRMS	14	21	28	35	42	57	71	Volts
Maximum DC blocking voltage		VDC	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current (see Fig.1)		l(AV)	8.0							Amps
Repetitive peak forward current(square wave, 20KHZ) at Tc=105℃		lFRM	16.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		lFSM	150.0							Amps
Maximum instantaneous forward voltage at 8.0 A(Note 1)		VF	0.65			0.75		0.80	0.85	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Ta =25℃	lR	1.0							mA
	Ta =125℃		15			50				
Typical thermal resistance (Note 2)		RθJC	2.5							℃/W
Operating junction temperature range		TJ	-65 to +125				-65 to +150			℃
Storage temperature range		TSTG	-65 to +150							℃

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

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR820-SR8AO(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

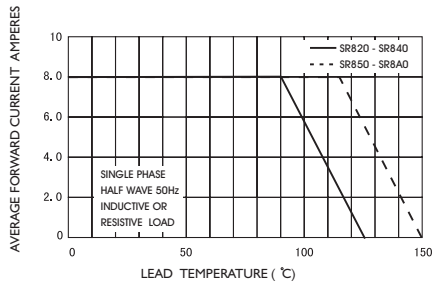


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

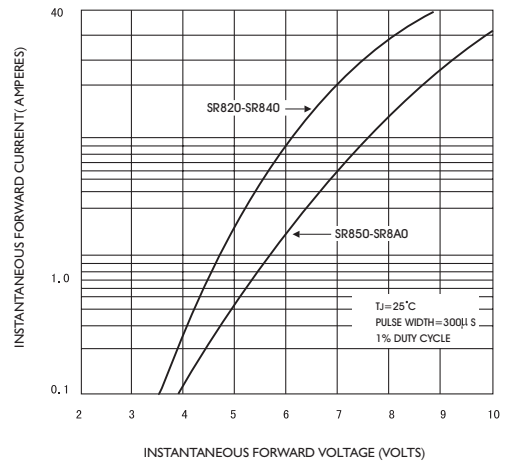


FIG.4-TYPICAL JUNCTION CAPACITANCE

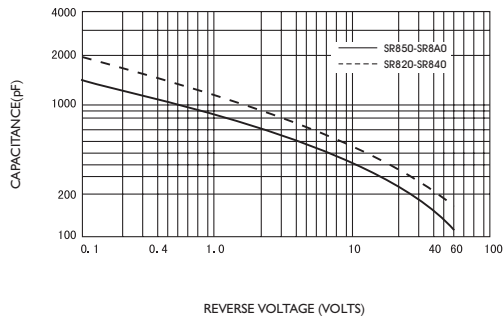


FIG.3-TYPICAL REVERSE CHARACTERISTICS

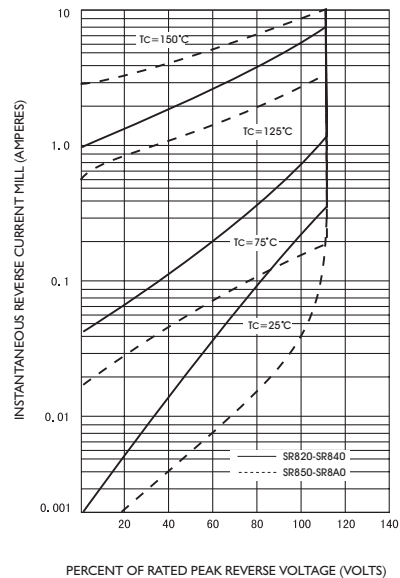


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

