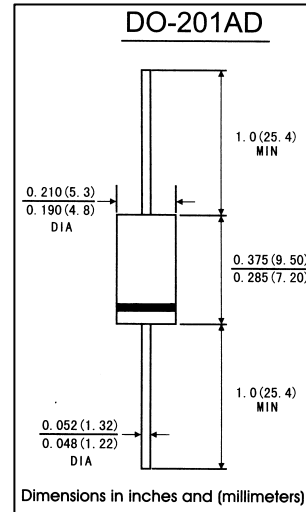


**FEATURES**

- . 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
- . High surge capability
- . For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- . High temperature soldering guaranteed: 250℃/10 seconds at terminals, 0.375"(9.5mm)lead length, 5lbs.(2.3kg)tension



**MECHANICAL DATA**

- . **Case:** JEDEC DO-201AD molded plastic body
- . **Terminals:** plated axial leads,solderable per MIL-STD-750,method 2026
- . **Polarity:** color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.041 ounce, 1.15 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

	Symbols	SR320	SR330	SR340	SR350	SR360	SR380	SR3A0	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	57	71	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current 0.375"(9.5mm)lead length (see Fig.1)	I <sub>(AV)</sub>	3.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80.0							Amps
Maximum instantaneous forward voltage at 3.0 A(Note 1)	V <sub>F</sub>	0.55		0.70		0.85			Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	TA=25℃	1.5							mA
	TA=100℃	20		10					
Typeical junction capacitance(Note 3)	C <sub>J</sub>	250			160				pF
Typeical thermal resistance(Note 2)	R θ <sub>JA</sub>	40.0							℃/W
	R θ <sub>JL</sub>	10.0							
Operating junction temperature range	T <sub>J</sub>	-65 to +125			-65 to +150				℃
storage temperature range	T <sub>STG</sub>	-65 to +150							℃

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

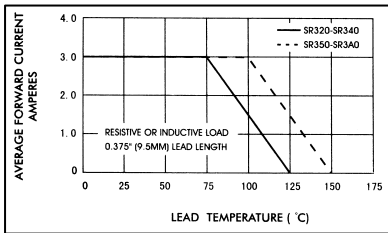
2.Thermal resistance from junction to lead vertical P.C.B. Mounted, 0.5"(12.7mm)lead length

with 2.5X2.5"(63.5X63.5mm)copper pads

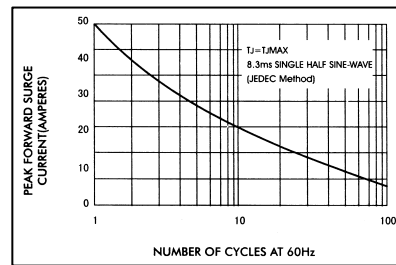
3.Measure a 1MHz and reverse voltage of 4.0volts

**RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3A0**

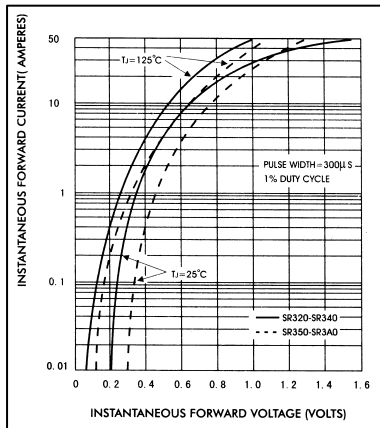
**FIG.1-FORWARD CURRENT DERATING CURVE**



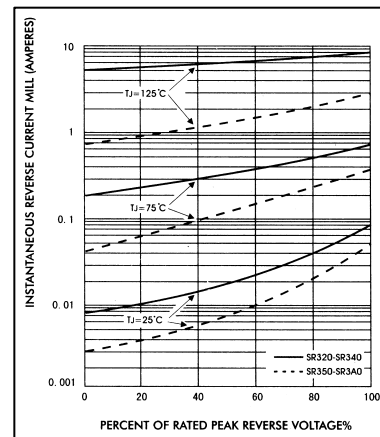
**FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



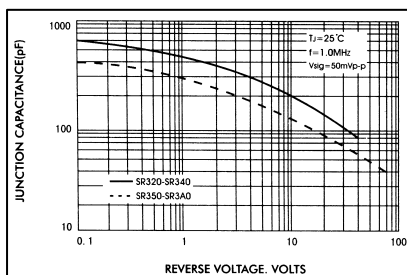
**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



**FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

