

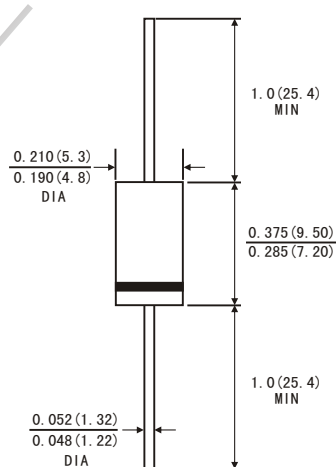
FEATURES

- 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:260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

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:* 0.041ounce, 1.15 grams

DO-201AD



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 520	SR 530	SR 540	SR 550	SR 560	SR 580	SR 5A0	SR 5150	SR 5200	Units
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	VRMS	14	21	28	35	42	57	71	105	140	Volts
Maximum DC blocking voltage	VBC	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)	5.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated Tj)	IFSM	150.0									Amps
Maximum instantaneous forward voltage at 5.0 A(Note 1)	VF	0.55			0.70		0.85		0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	Ta = 25°C Ta = 100°C	IR	0.5								mA
			50			25					
Typical junction capacitance(Note 3)	CJ	500				400					pF
Typical thermal resistance (Note 2)	RθJA RθJL	25.0 8.0									°C/W
Operating junction temperature range	TJ	-65 to+125				-65 to+150					°C
Storage temperature range	TSTG	-65 to+150									°C

Notes: 1.Pulse test: 300μs 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 4.0 volts

RATINGS AND CHARACTERISTIC CURVES SR520 THRU SR5200

FIG.1-FORWARD CURRENT DERATING CURVE

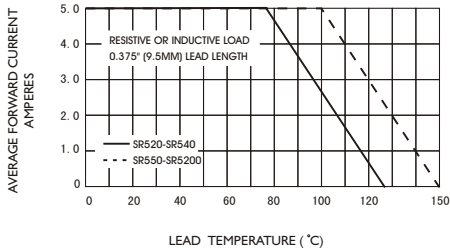


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

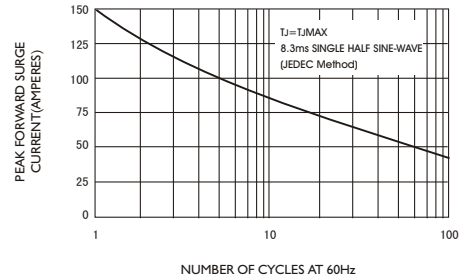


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

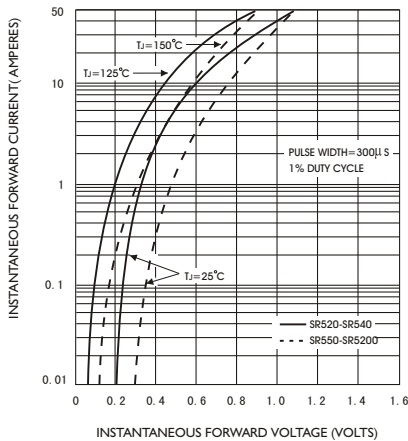


FIG.4-TYPICAL REVERSE CHARACTERISTICS

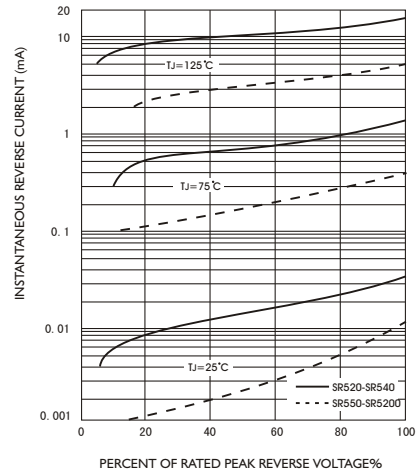


FIG.5-TYPICAL JUNCTION CAPACITANCE

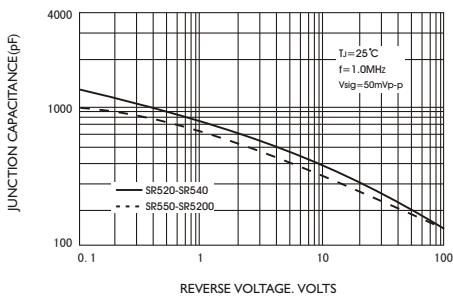


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

