

SR320 THRU SR3200

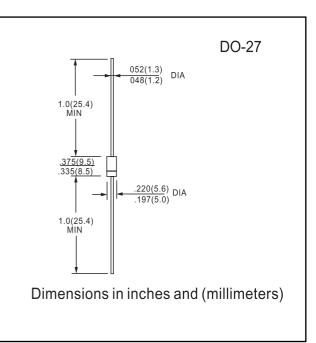
20V-200V 3.0A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- $\cdot\,$ Metal silicon junction ,majority carrier conduction
- $\cdot\,$ Guard ring for overvoltage protection
- $\cdot\,$ Low power loss ,high efficiency
- $\cdot\,$ 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

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: 0.014ounce, 0.39 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	SR 320	SR 330	SR 340	SR 350	SR 360	SR 380	SR 3100	SR 3150	SR 3200	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		Vdc	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(A∨)	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		Ifsm	80.0									Amps
Maximum instantaneous forward voltage at 3.0 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)	T₄=25°C	1-	0.2									mA
	T _A =100°C	IR	20 10									
Typical junction capacitance(Note 3)		CJ	250 160							РF		
Typical thermal resistance (Note 2)		R _û ja R _û jl	40.0 10.0									°C/W
Operating junction temperature range		TJ	-65 to+150									°C
Storage temperature range		Tstg	-65 to+150									°C

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.Measured at 1MHz and reverse voltage of 4.0volts

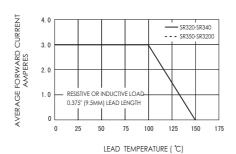


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RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3200

FIG.1-FORWARD CURRENT DERATING CURVE





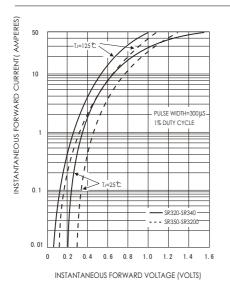


FIG.5-TYPICAL JUNCTION CAPACITANCE

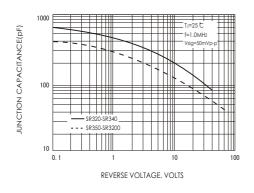


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

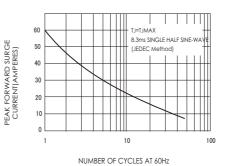
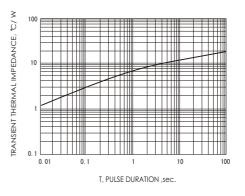


FIG.4-TYPICAL REVERSE CHARACTERISTICS

10 INSTANTANEOUS REVERSE CURRENT (mA) 25 C 75 C 0.1 0.01 =25 C * 320-SR340 - - - SR350-SR3200 0.001 20 40 60 80 100 0 PERCENT OF RATED PEAK REVERSE VOLTAGE%

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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