



SCHOTTKY BARRIER RECTIFIER

SR320 - SR3200

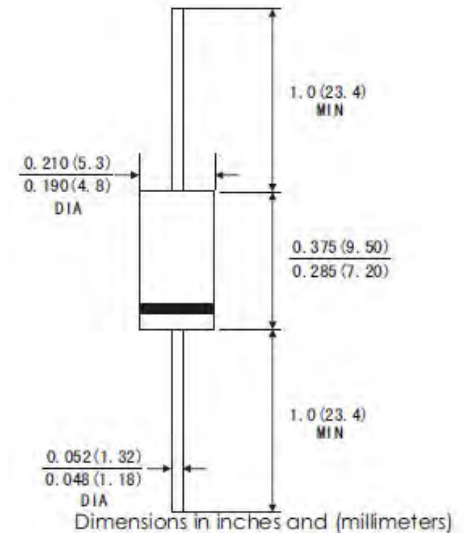
Reverse Voltage : 20 to 200 Volts

Forward Current : 3.0 Amperes

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

DO-201AD



MECHANICAL DATA

- Case: JEDEC DO-201 AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-SRD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041 ounce, 1.15 grams

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	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current (0.375"(9.5mm) lead length)	$I_{(AV)}$	3.0									Amp
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0									Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	V_F	0.55			0.70		0.85	0.90	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note 1)	$T_A = 25^\circ\text{C}$	0.2									mA
	$T_A = 100^\circ\text{C}$	20			10						
Typical Junction Capacitance (NOTE 3)	C_J	250			160						pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	40.0									°C/W
	$R_{\theta JI}$	10.0									
Operating junction Temperature Range	T_J	-65 to +150									°C
Storage Temperature Range	T_{STG}	-65 to +150									°C

Notes:

- Pulse test : 300 us pulse width, 1% duty cycle
- Thermal resistance from junction to lead vertical P.C.B. mounted, 0.5" (12.7mm) lead length with 2.5*2.5" (63.5*63.5mm) copper pads
- Measured at 1MHz and reverse voltage of 4.0 volts



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RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3200

FIG.1-FORWARD CURRENT DERATING CURVE

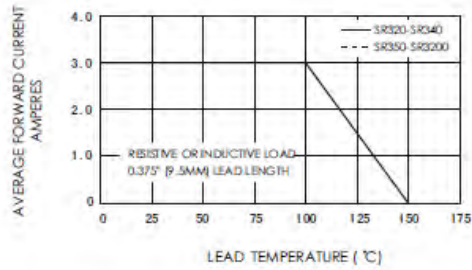


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

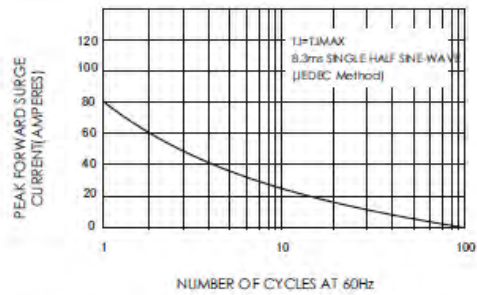


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

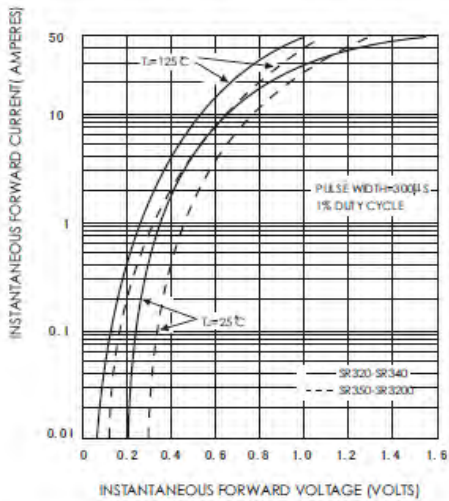


FIG.4-TYPICAL REVERSE CHARACTERISTICS

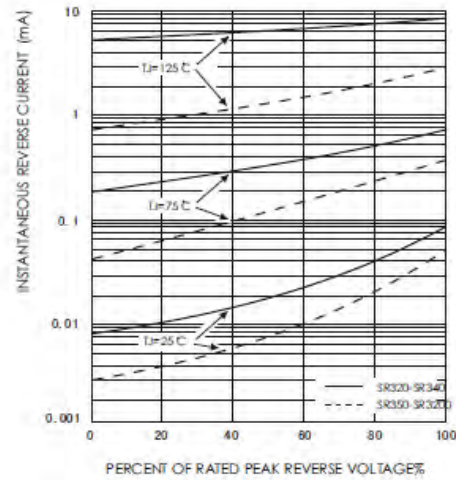


FIG.5-TYPICAL JUNCTION CAPACITANCE

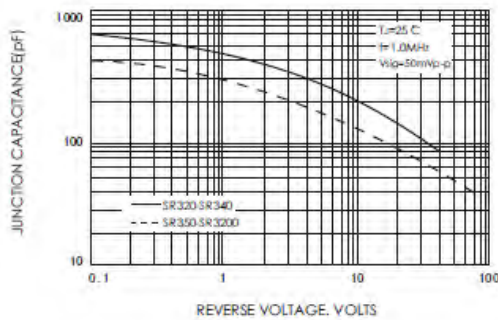


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

