

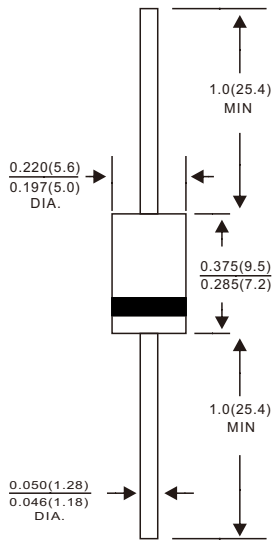


# SR320 THRU SR3200

## SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Ampere

### DO-201AD



Dimensions in inches and (millimeters)

### FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (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:** 0.04 ounce, 1.10 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	SR 320	SR 330	SR 340	SR 350	SR 360	SR 370	SR 380	SR 390	SR 3100	SR 3150	SR 3200	UNITS	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	150	200	VOLTS	
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	105	140	VOLTS	
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	150	200	VOLTS	
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig.1)	I <sub(av)< sub=""></sub(av)<>	3.0											Amps	
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 3.0A	V <sub>F</sub>	0.55		0.70		0.85			0.95				Volts	
Maximum DC reverse current T <sub>A</sub> =25 °C at rated DC blocking voltage T <sub>A</sub> =100 °C	I <sub>R</sub>	0.5					0.2							mA
		20.0			10.0			2.0						
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	250.0			160.0									pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	40.0											°C/W	
Operating junction temperature range	T <sub>J</sub>	-65 to +125					-65 to +150							°C
Storage temperature range	T <sub>STG</sub>	-65 to +150											°C	

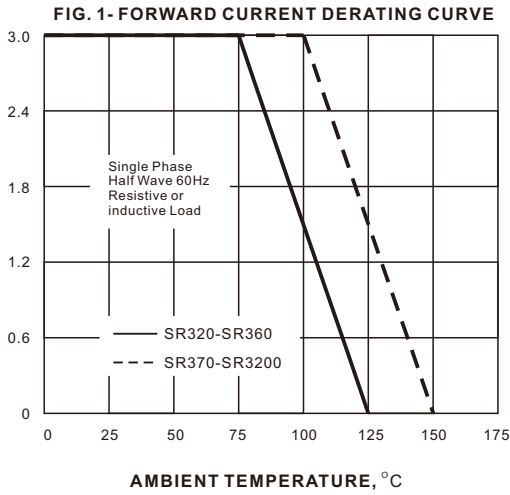
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

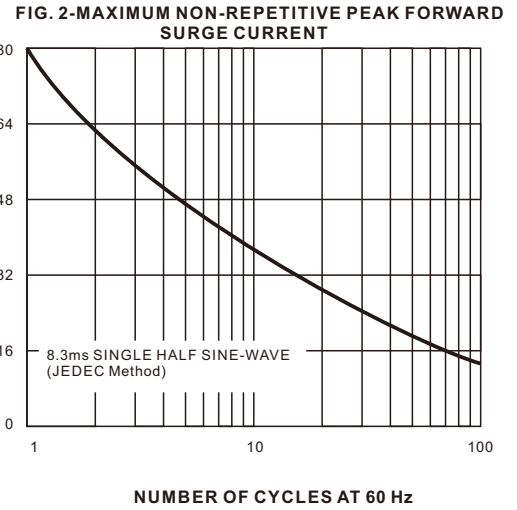


### RATINGS AND CHARACTERISTIC CURVES SR320 THRU SR3200

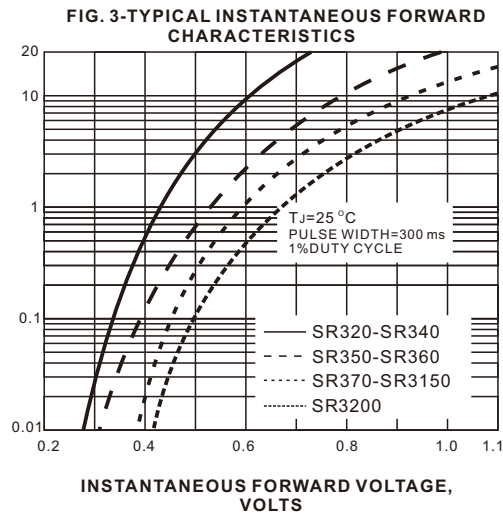
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



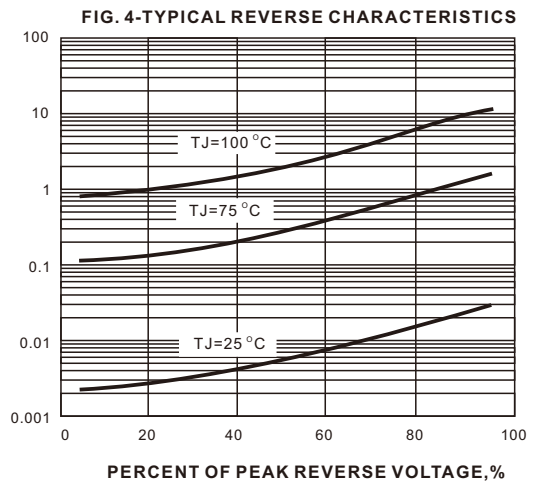
PEAK FORWARD SURGE CURRENT, AMPERES



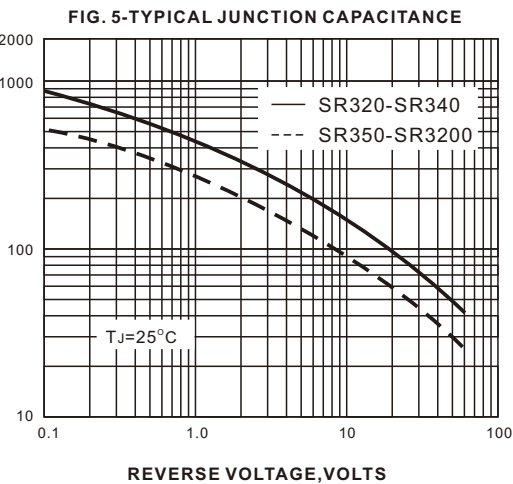
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

