

### **Schottky Barrier Rectifiers SR320 THRU SR3200**

**VOLTAGE RANGE Forward Current** 

20 to 200 Volts 3.0 Amperes

#### **FEATURES**

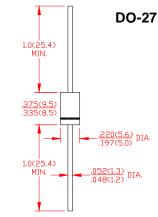
- I Fast switching
- I Low forward voltage, high current capability.
- I Low power loss high efficiency
- I High current surge capability
- I Fast switching for high efficiency
- I High temperature soldering guaranteed: 250 °C/10 second, at terminals

#### MECHANICAL DATA

- I Case: Transfer molded plastic
- I Terminal: UL94v-0 rate flame retardant I Polarity: Color band denotes cathode end.
- I Lead Plated axial lead ,solderable per MIL-STD-202E method

208C

I Mounting position: Any. **I** Weight: 0.042 ounce 1.19 gram



Dimensions in inches and (millimeters)

#### 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 derate current by 20%.

RATINGS	SYMBOL	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	I <sub>O</sub>	3.0								Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80							Amps		
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	40									
Typical Thermal Nesistance (Note 1)		10									
Typical Junction Capacitance (Note 3)	CJ	C <sub>J</sub> 200							pF		
Operating Temperature Range	TJ	150							٥C		
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150								٥C	

#### ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS			SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC		V <sub>F</sub>	.55		.75		.85				Volts	
Maximum Average Reverse Current	@T <sub>A</sub> = 25°C		0.2									mΑ
at Rated DC Blocking Voltage	@T <sub>A</sub> = 100°C	IR	2									mΑ

NOTES: 1. Thermal Resistance: At 9.5mm lead lengths, PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

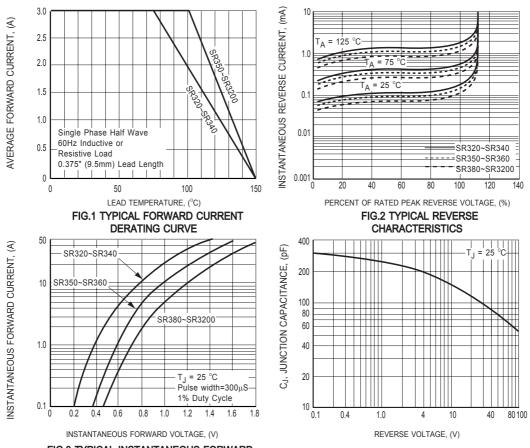
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## RATING AND CHARACTERISTICS CURVES (SR320 THRU SR3200)



# FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

FIG.4 TYPICAL JUNCTION CAPACITANCE

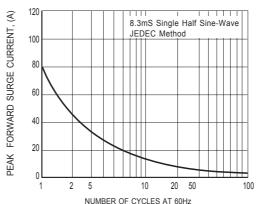


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT