



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**SR520  
THRU  
SR560**

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 60 Volts**

**CURRENT - 5.0 Amperes**

**FEATURES**

- \* High reliability
- \* Low switching noise
- \* Low forward voltage drop
- \* High current capability
- \* High switching capability

**MECHANICAL DATA**

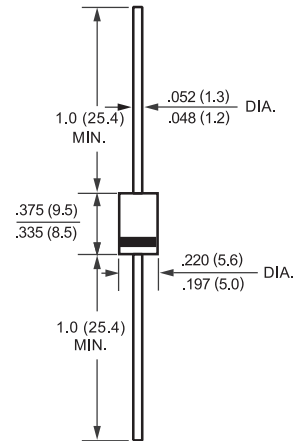
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.18 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



DO-27



Dimensions in inches and (millimeters)

	SYMBOL	SR520	SR530	SR540	SR550	SR560	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length	I <sub>O</sub>	5.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150					Amps
Maximum Instantaneous Forward Voltage at 5.0A DC	V <sub>F</sub>	.55			.70		Volts
Maximum DC Reverse Current	I <sub>R</sub>	@T <sub>A</sub> = 25°C					mAmps
at Rated DC Blocking Voltage		@T <sub>A</sub> = 100°C					
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	18					°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	550			400		pF
Operating Temperature Range	T <sub>J</sub>	-65 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5\*(12.7mm) Lead Length.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES (SR520 THRU SR560)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

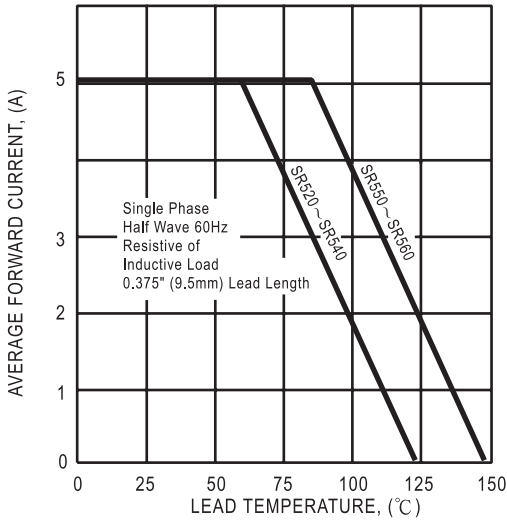


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

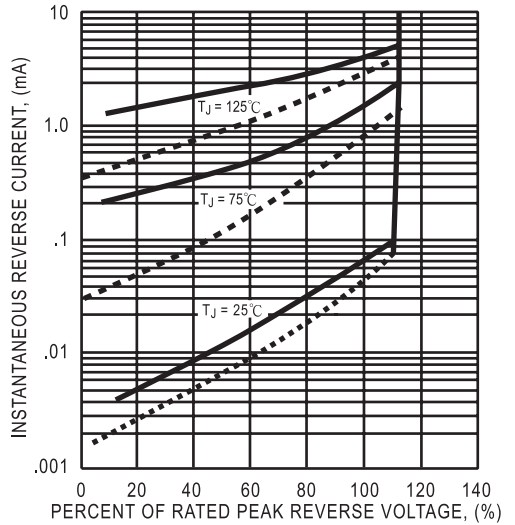


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

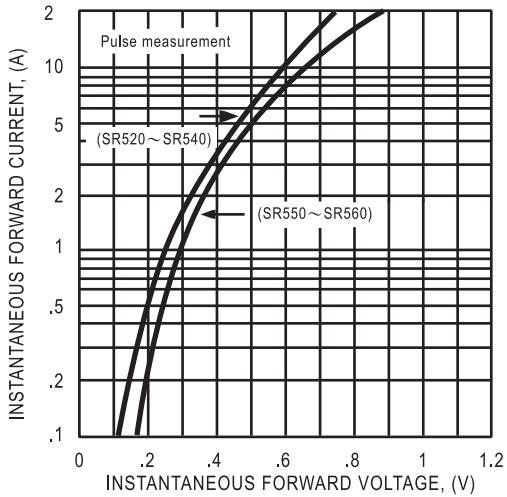


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

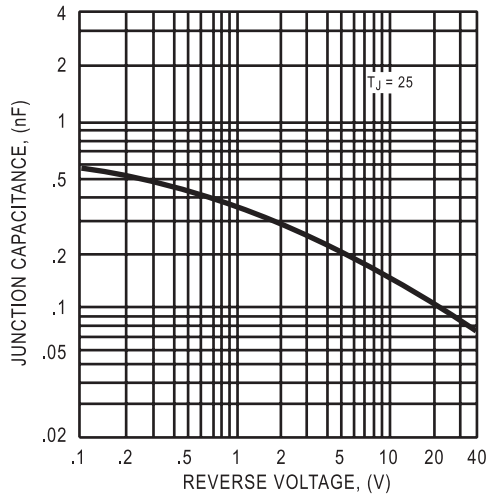
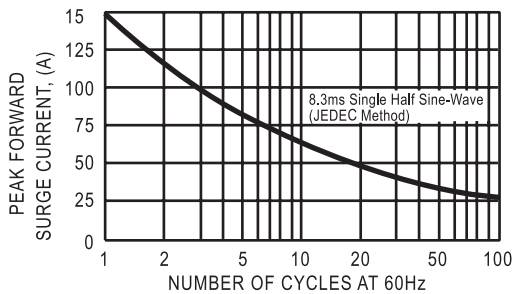


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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