



# DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR150  
THRU  
SR1100

## TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 50 to 100 Volts

CURRENT - 1.0 Ampere

### FEATURES

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

### MECHANICAL DATA

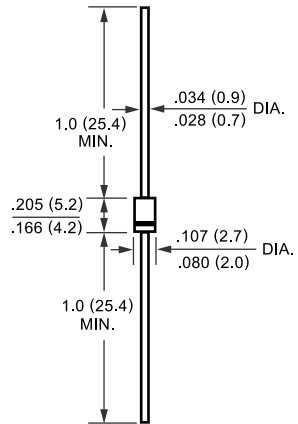
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.33 gram

### 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-41



Dimensions in inches and (millimeters)

	SYMBOL	SR150	SR160	SR180	SR1100	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	60	80	100	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	42	56	70	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	60	80	100	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length	I <sub>O</sub>	1.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40				Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	V <sub>F</sub>	.70		.85		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				mAmps
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	50				°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110				pF
Operating Temperature Range	T <sub>J</sub>	-50 to + 125				°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 150				°C

NOTES : 1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.375\*(9.5mm) Lead Length.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES (SR150 THRU SR1100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

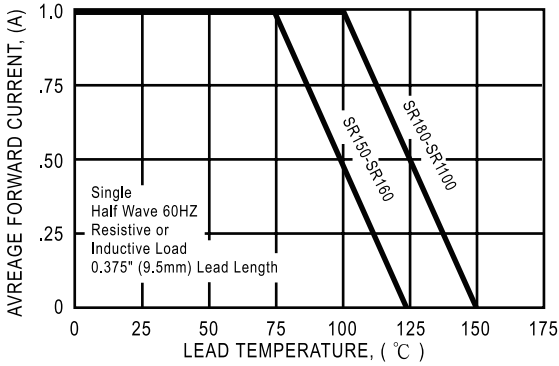


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

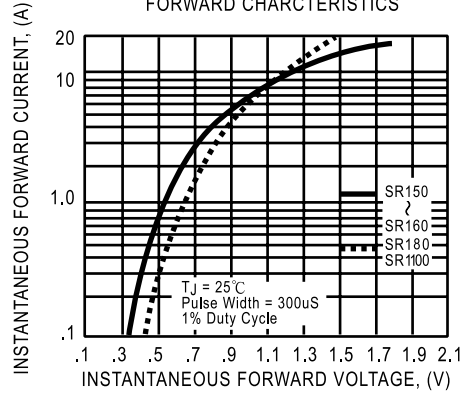


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

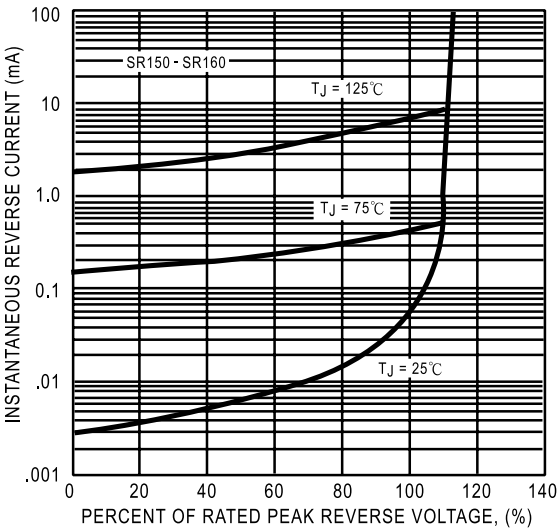


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

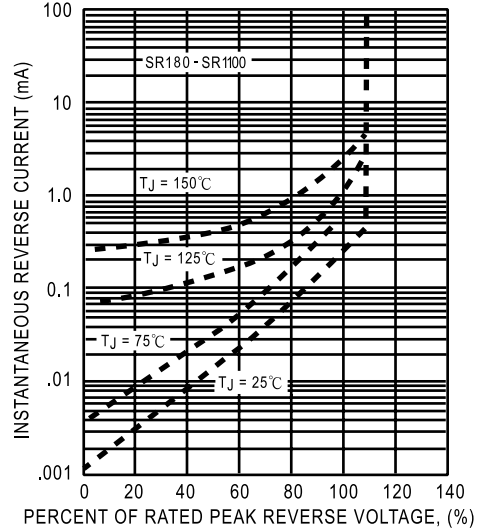


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

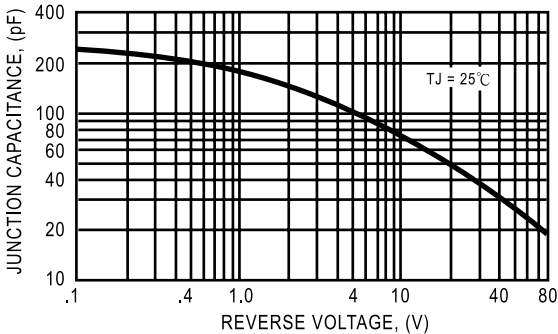
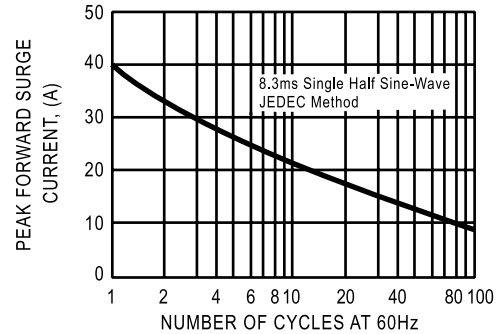


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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