



**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**

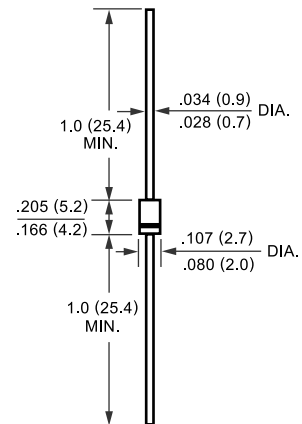
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.33 gram

**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		VRRM	50	60	80	100	Volts
Maximum RMS Voltage		VRMS	35	42	56	70	Volts
Maximum DC Blocking Voltage		VDC	50	60	80	100	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length		IO	1.0				Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	40				Amps
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	.70		.85		Volts
Maximum DC Reverse Current	@TA = 25°C	IR	1.0				mAmps
at Rated DC Blocking Voltage	@TA = 100°C		10				mAmps
Typical Thermal Resistance (Note 1)		RθJA	50				°C/W
Typical Junction Capacitance (Note 2)		CJ	110				pF
Operating Temperature Range		TJ	-50 to + 125				°C
Storage Temperature Range		TSTG	-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

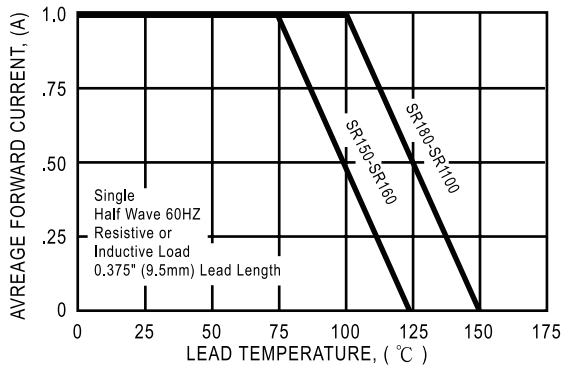


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

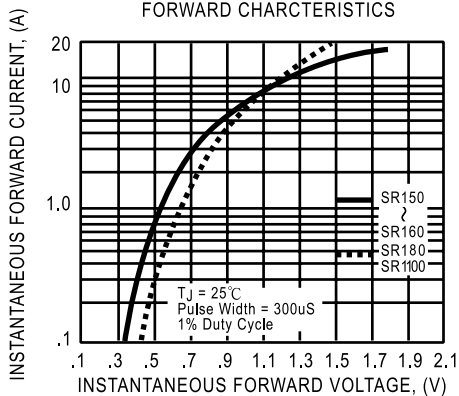


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

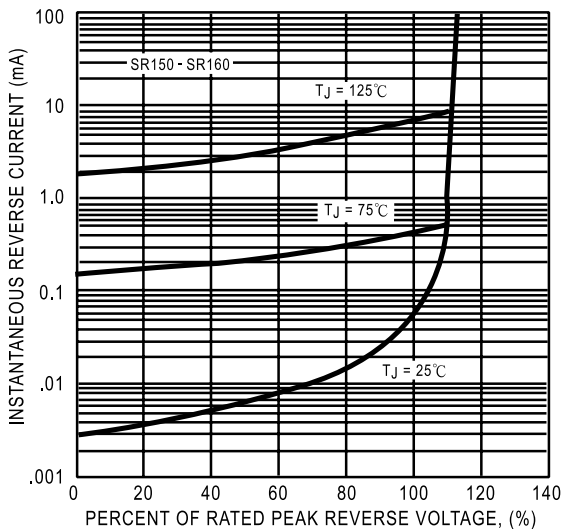


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

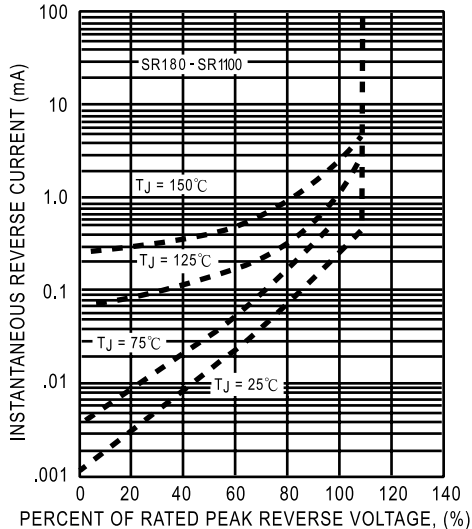


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

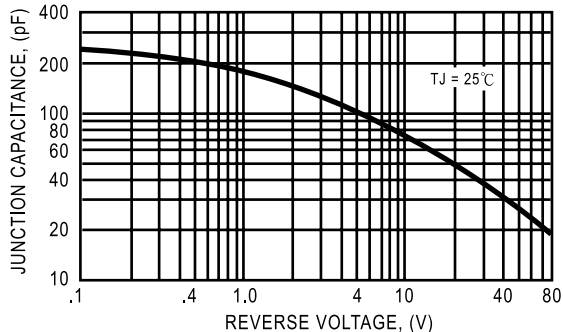
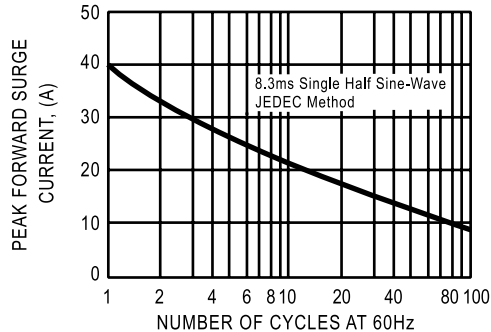


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



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