



# DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR1020  
THRU  
SR1060

## TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 60 Volts

CURRENT - 10 Amperes

### FEATURES

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

### MECHANICAL DATA

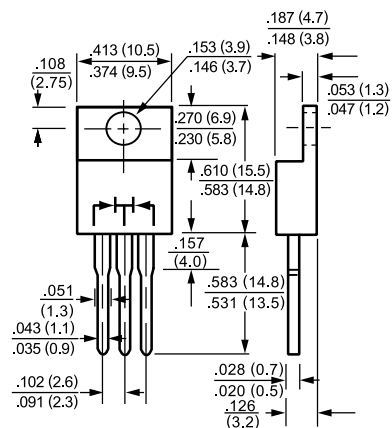
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

### 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%.



TO-220



Dimensions in inches and (millimeters)

	SYMBOL	SR1020	SR1030	SR1040	SR1050	SR1060	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 at Derating Case Temperature	I <sub>O</sub>	10					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>	.65			.75		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>c</sub> = 25°C	5					mAmps
	@T <sub>c</sub> = 100°C	100					mAmps
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	3.0					°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	700					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 Case per leg.  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. Suffix "A"= Common Anode.

# RATING AND CHARACTERISTIC CURVES (SR1020 THRU SR1060)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

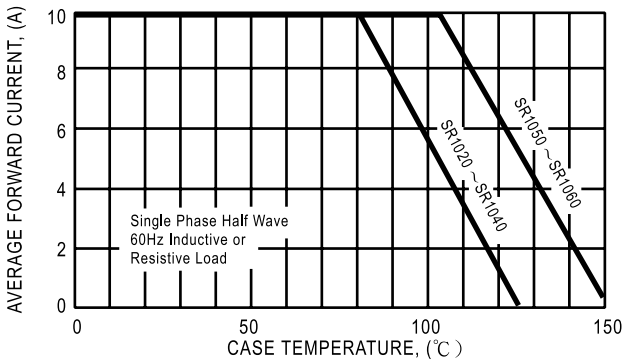


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

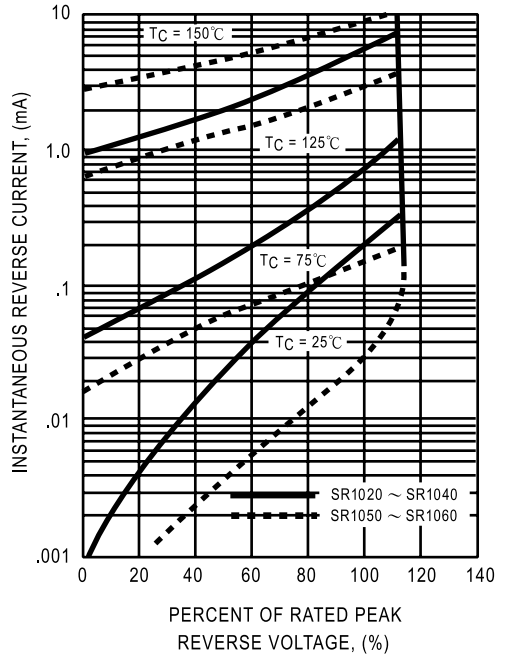


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

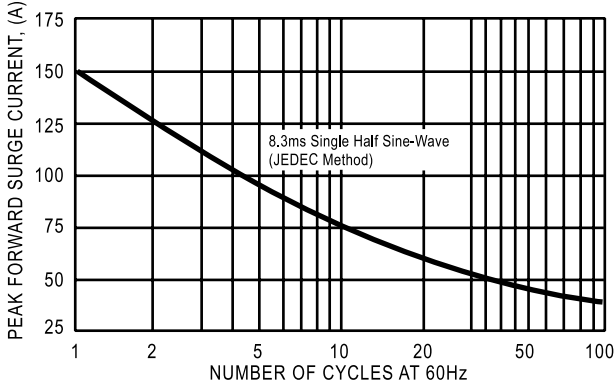


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

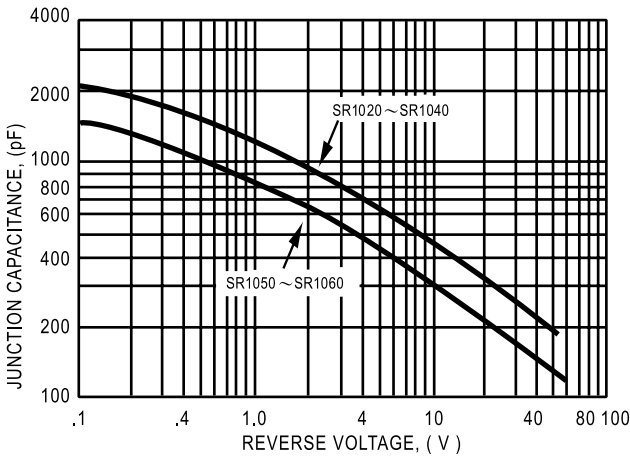


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

