



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**SR5020  
THRU  
SR5060**

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 60 Volts**

**CURRENT - 50 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: 5.6 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

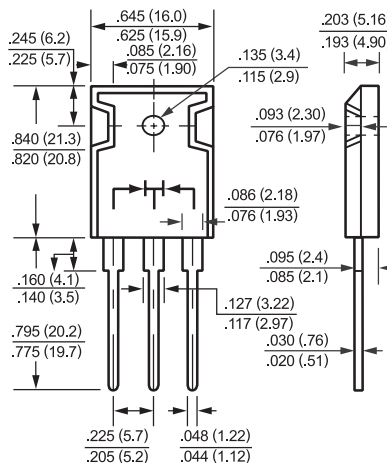
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



**TO-3P**



Dimensions in inches and (millimeters)

	SYMBOL	SR5020	SR5030	SR5040	SR5050	SR5060	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>	50					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	400					Amps
Maximum Instantaneous Forward Voltage at 25.0A DC	V <sub>F</sub>						Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>						mAmps
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	1.2					°C/W
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. Suffix "A" = Common Anode.

# RATING AND CHARACTERISTIC CURVES (SR5020 THRU SR5060)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

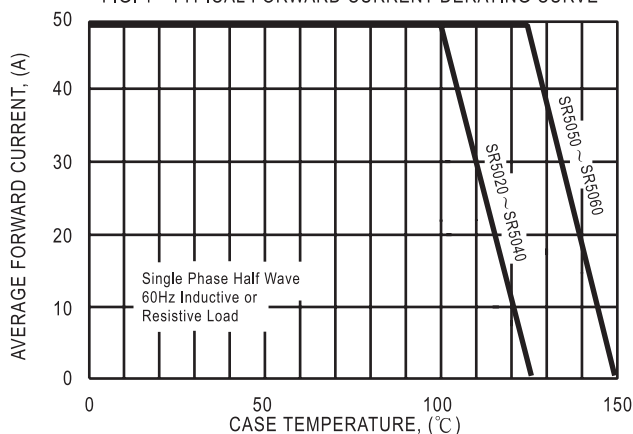


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

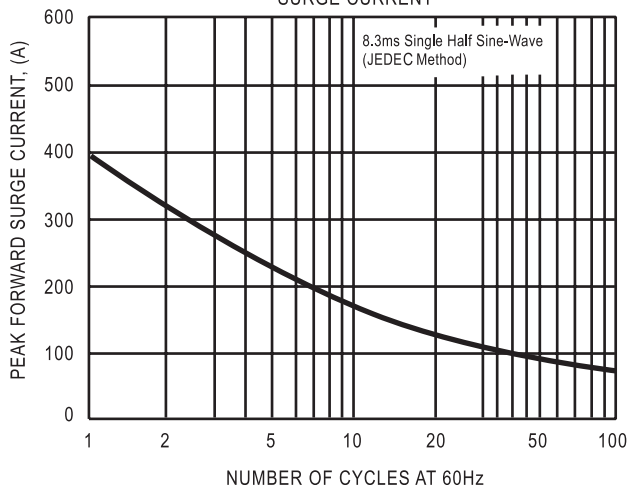


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

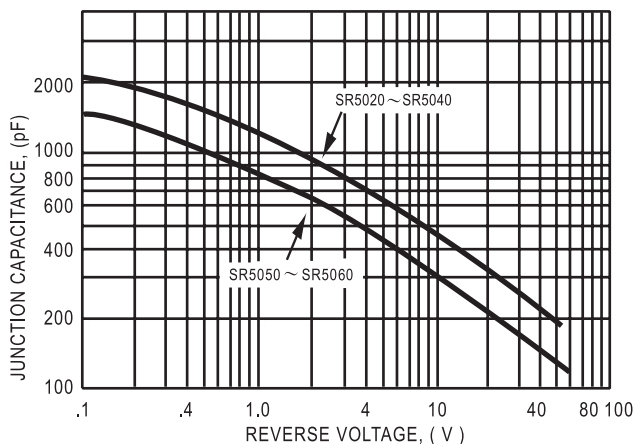


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

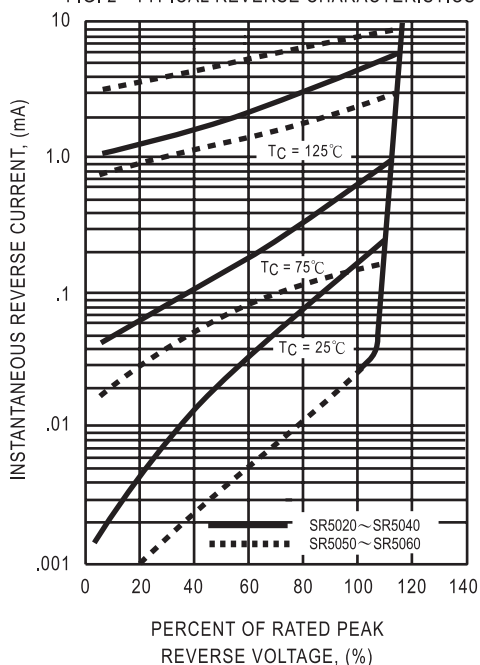
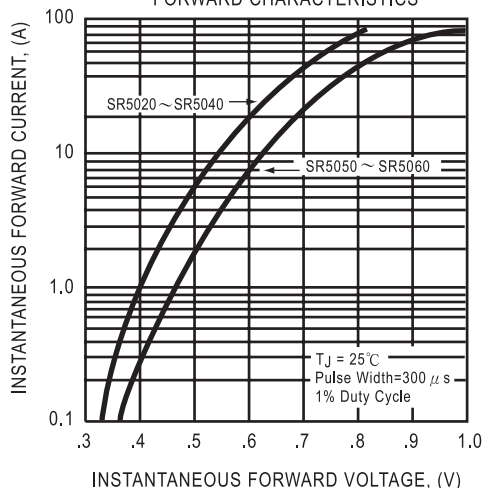


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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