



**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**

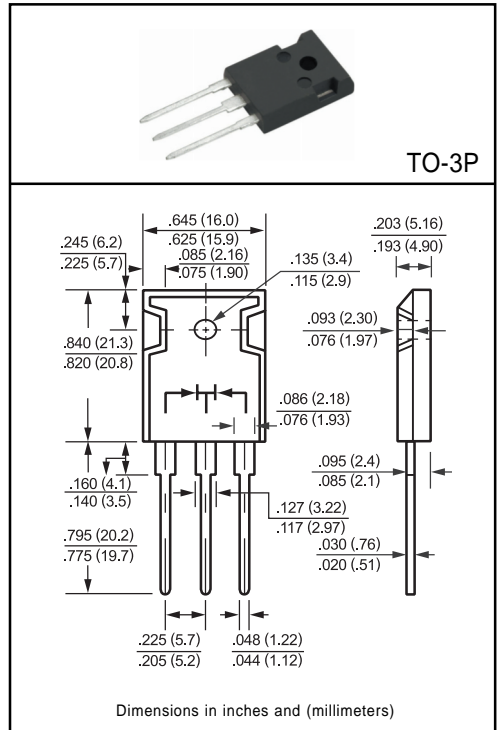
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**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%.



	SYMBOL	SR5020	SR5030	SR5040	SR5050	SR5060	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	IO	50					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	400					Amps
Maximum Instantaneous Forward Voltage at 25.0A DC	VF				.65	.75	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@Tc = 25°C					mAmps
		@Tc = 100°C					mAmps
Typical Thermal Resistance (Note 1)	RθJC	1.2					°C/W
Operating Temperature Range	TJ	-65 to + 150					°C
Storage Temperature Range	TSTG	-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

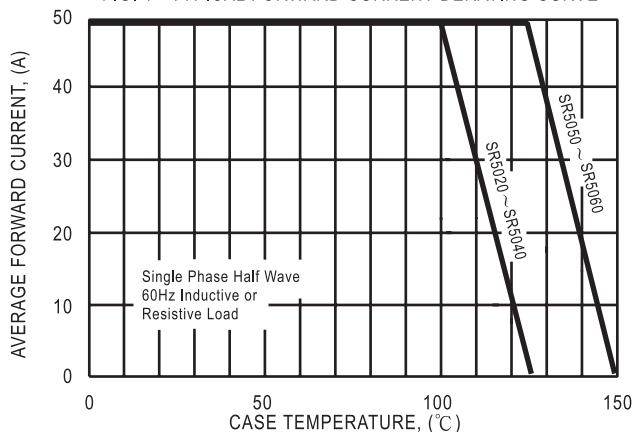


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

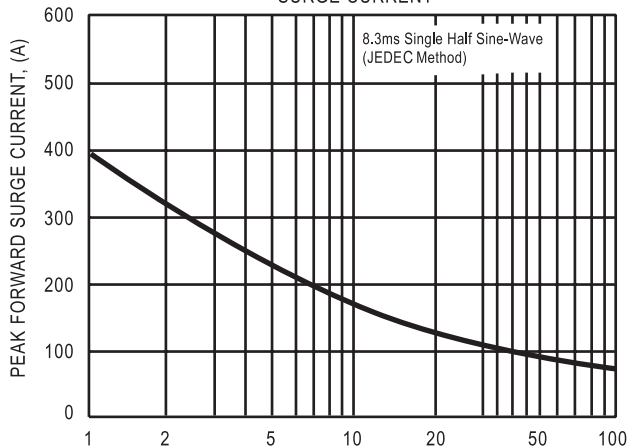


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

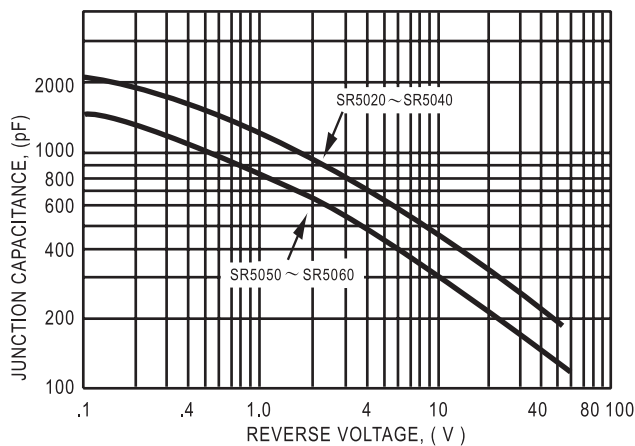


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

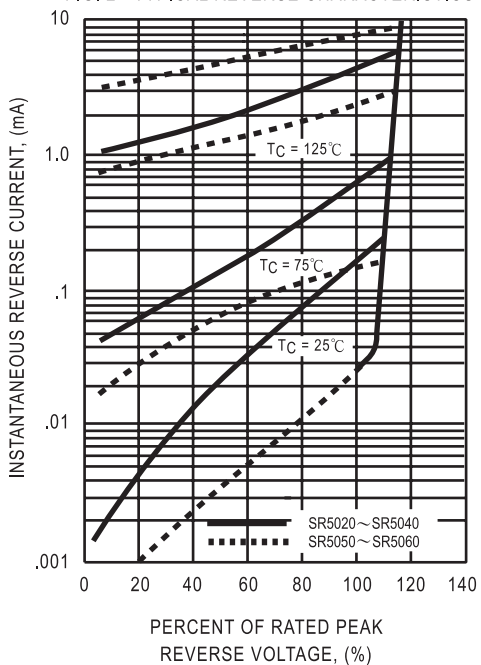
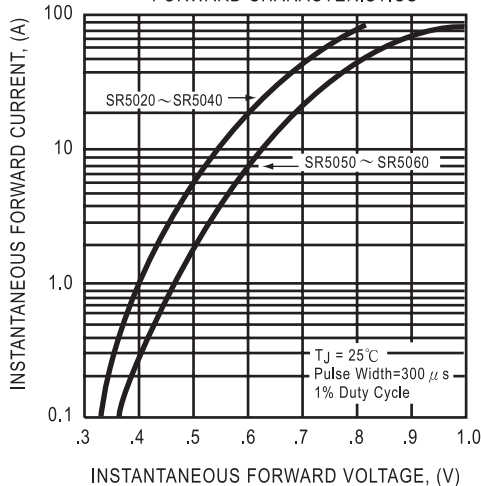


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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