



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**SR820  
THRU  
SR860**

**TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER**

**VOLTAGE RANGE - 20 to 60 Volts**

**CURRENT - 8.0 Amperes**

**FEATURES**

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

**MECHANICAL DATA**

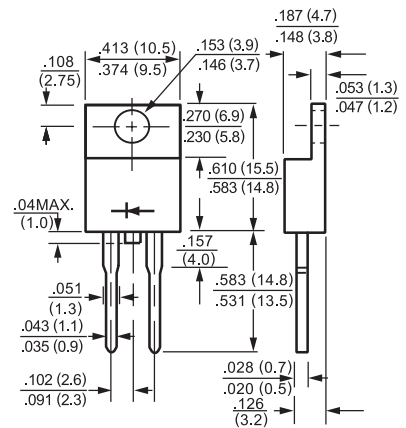
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 2.24 grams

**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-220A



Dimensions in inches and (millimeters)

	SYMBOL	SR820	SR830	SR840	SR850	SR860	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	8.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150					Amps
Maximum Instantaneous Forward Voltage at 8.0A DC	VF	.65			.75		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tc = 25°C	5.0					mAmps
	@Tc = 100°C	50					
Typical Thermal Resistance (Note 1)	RθJC	5.0					°C/W
Typical Junction Capacitance (Note 2)	CJ	700					pF
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. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. Suffix "R" for Reverse Polarity.

# RATING AND CHARACTERISTIC CURVES (SR820 THRU SR860)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

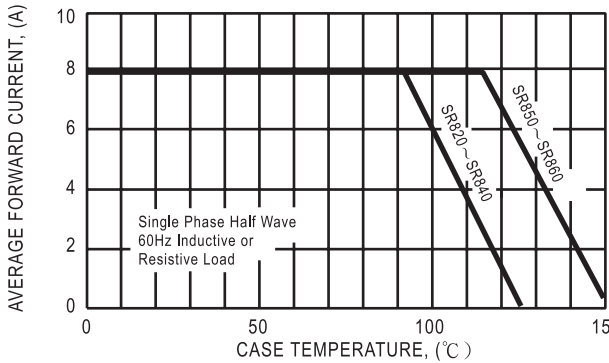


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

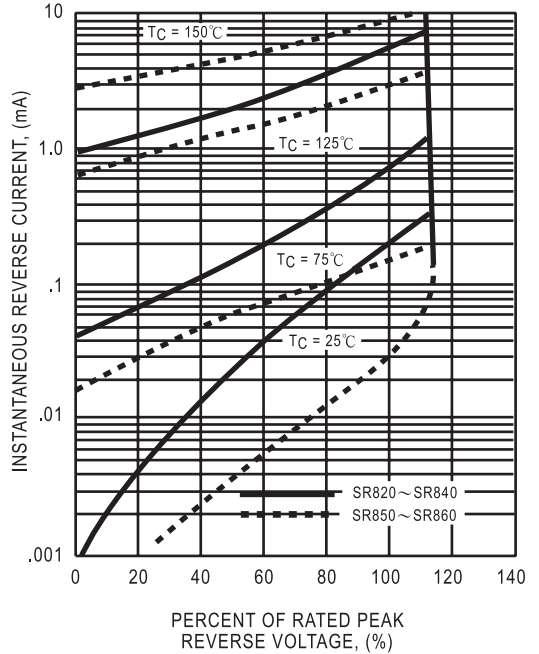


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

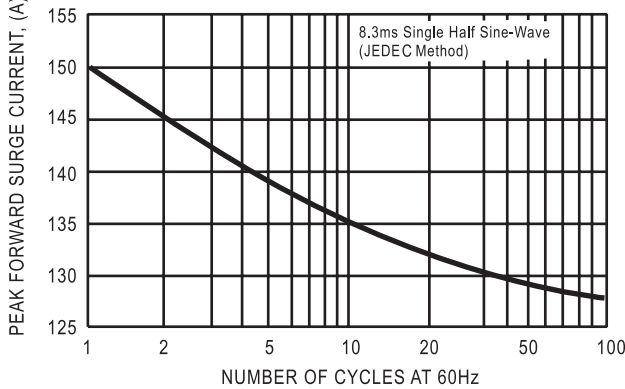


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

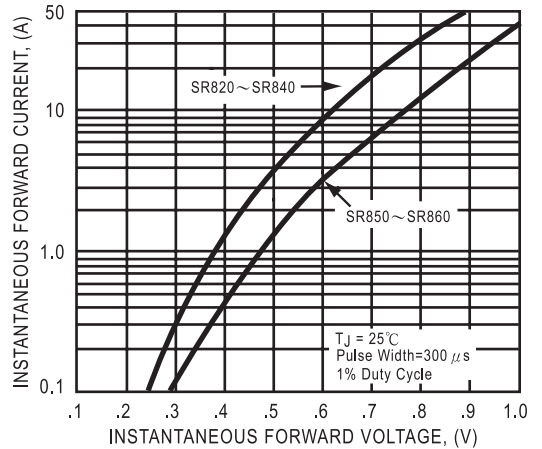
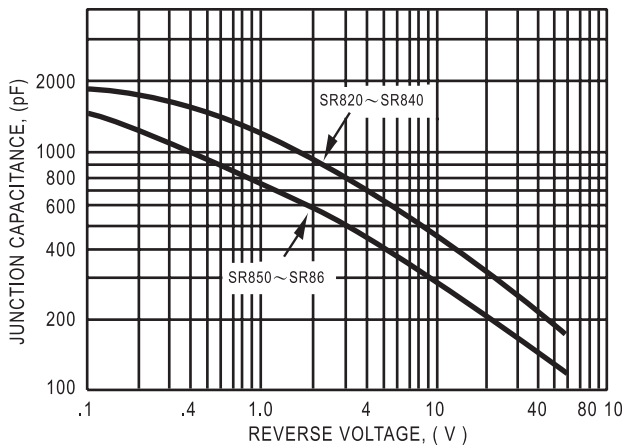


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



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