



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

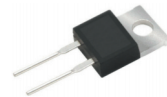
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

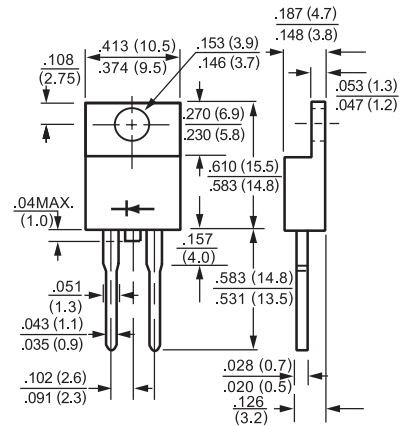
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 2.24 grams

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	V _{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I _O	8.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150					Amps
Maximum Instantaneous Forward Voltage at 8.0A DC	V _F	.65			.75		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _C = 25°C	5.0					mAmps
	@T _C = 100°C	50					
Typical Thermal Resistance (Note 1)	R _{θJC}	5.0					°C/W
Typical Junction Capacitance (Note 2)	C _J	700					pF
Operating Temperature Range	T _J	-65 to + 150					°C
Storage Temperature Range	T _{STG}	-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

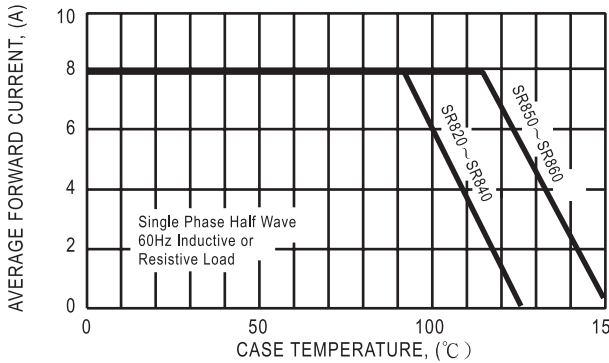


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

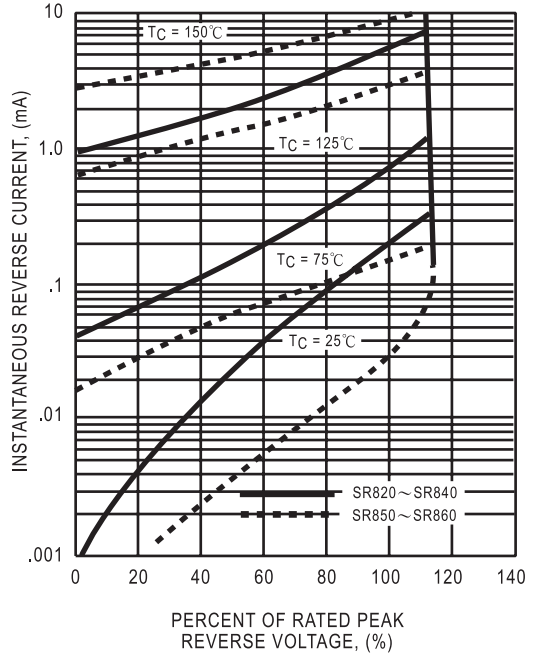


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

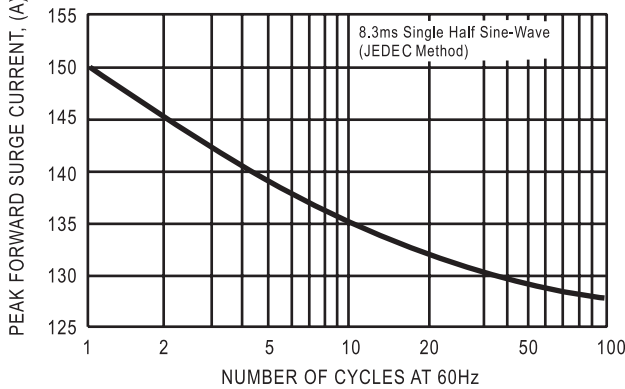


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

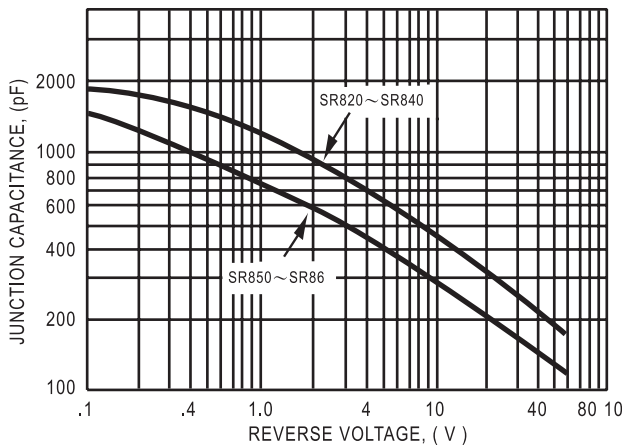
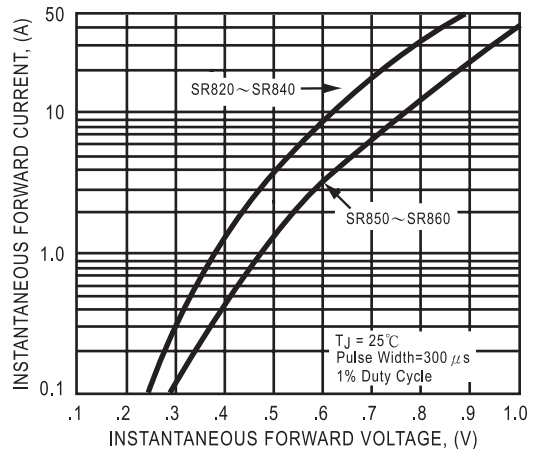


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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