



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SR820
THRU
SR8100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

CURRENT - 8.0 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

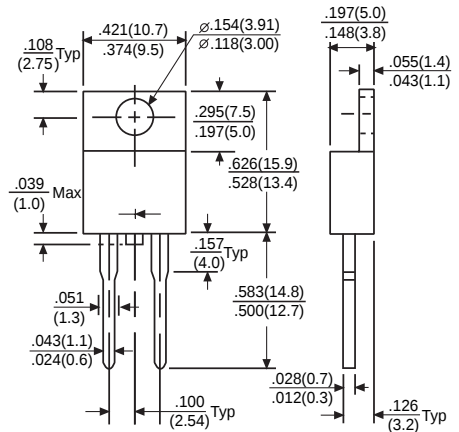
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



TO-220A



Dimensions in inches and (millimeters)

		SYMBOL	SR820	SR830	SR840	SR850	SR860	SR880	SR8100	UNITS
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage		V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage		V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature		I _O	8.0							Amps
Peak Forward Surge Current I _{FM} (surge): 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	0.65			0.75		0.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _C = 25°C	I _R	2.0							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 and Storage Temperature Range		T _J , T _{STG}	-65 to +125				°C			

Note : 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.

4. Suffix "F" Stands for "ITO-220A" package. (e.g.: SR820F, SR830F,etc)

RATING AND CHARACTERISTIC CURVES (SR820 THRU SR8100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

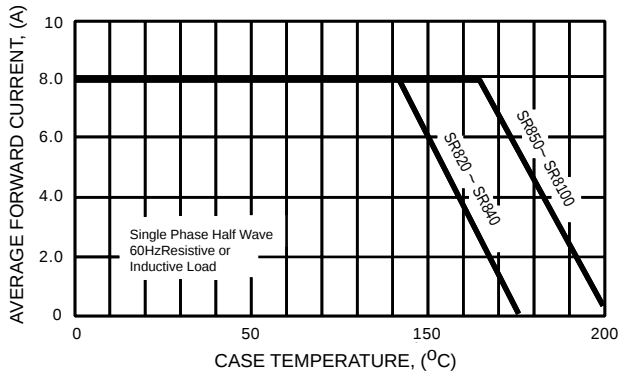


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

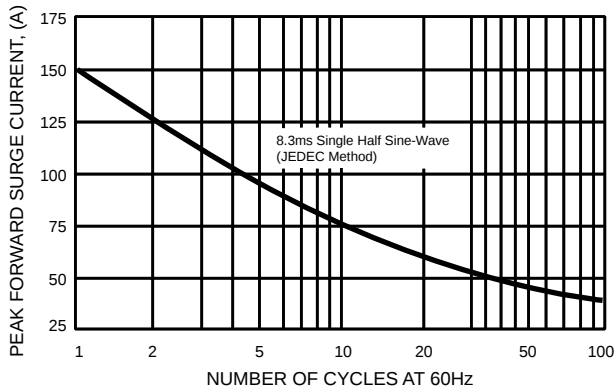


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

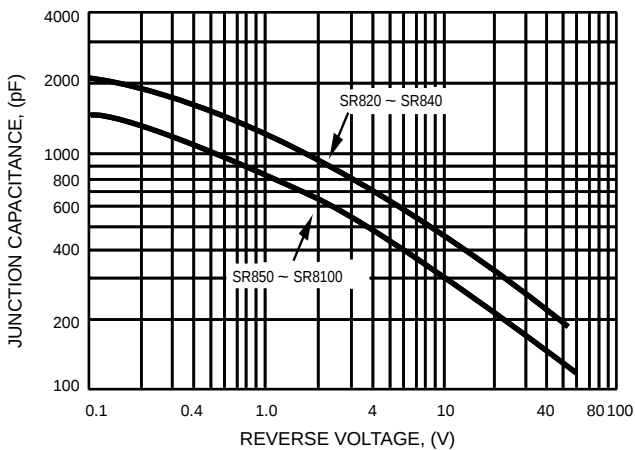


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

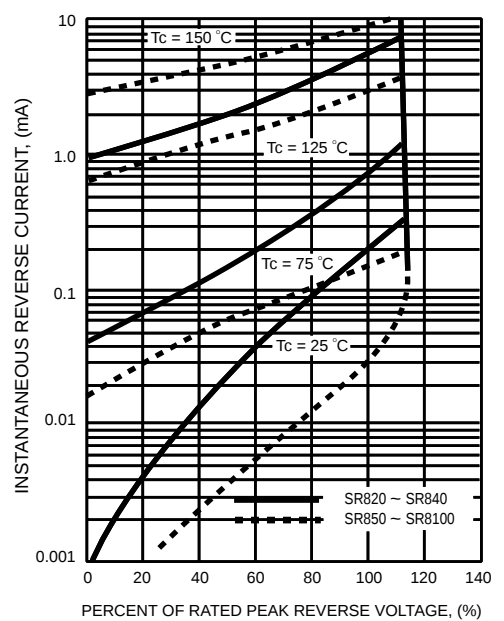
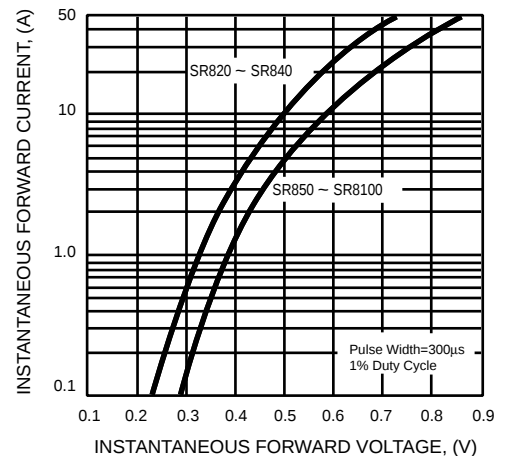


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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