

## SR820 THRU SR8100

### TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 100 Volts

CURRENT - 8.0 Amperes

#### FEATURES

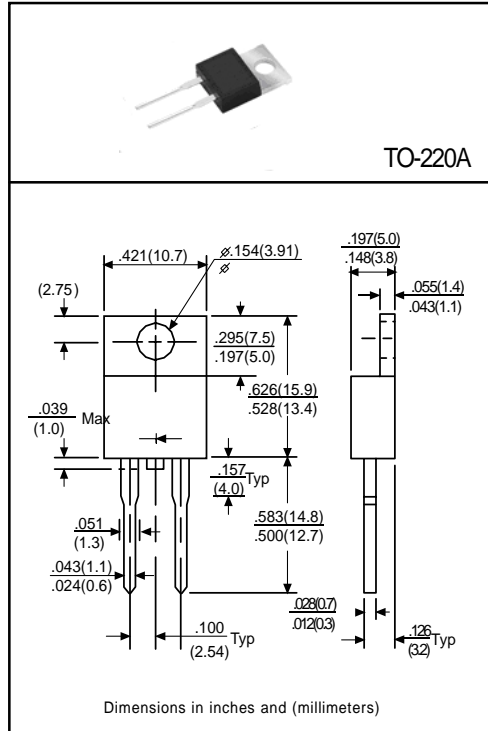
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

#### 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%.



	SYMBOL	SR820	SR830	SR840	SR850	SR860	SR880	SR8100	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	Io	8.0							Amps
Peak Forward Surge Current IFM(surge): 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	0.65		0.75		0.85		Volts	
Maximum DC Reverse Current at	IR	2.0							mAmps
Rated DC Blocking Voltage		50							
Typical Thermal Resistance (Note 1)	RθJC	5.0							°C/W
Typical Junction Capacitance (Note 2)	CJ	700							pF
Operating and Storage Temperature Range	TJ, TSTG	-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 "TO-220A" package. (e.g.: SR820E, SR830F, .....etc)

# RATING AND CHARACTERISTIC CURVES (SR820 THRU SR8100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

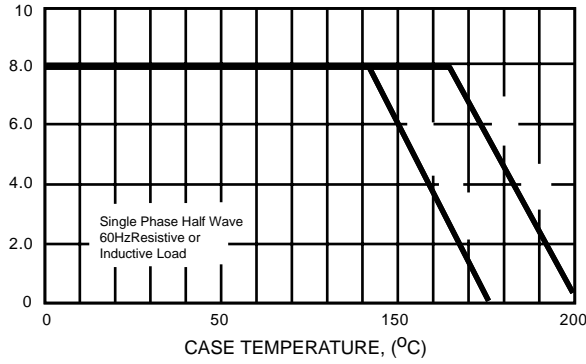


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

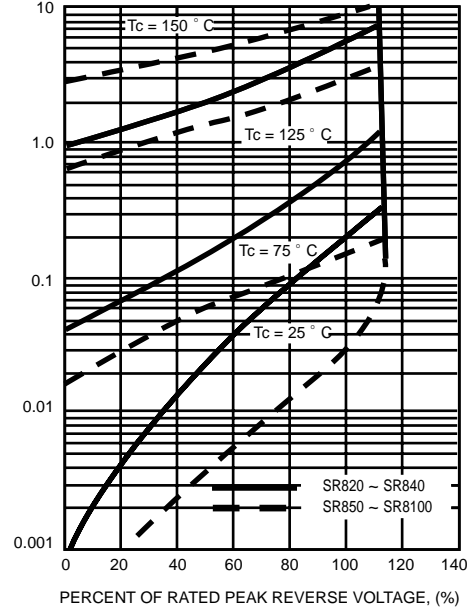


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

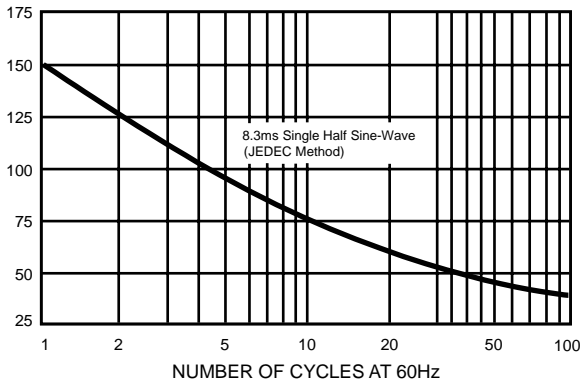


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

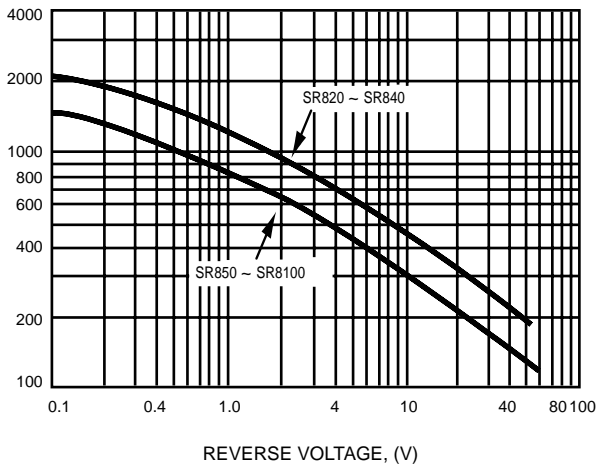


FIG. 5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

