SR820 THRU SR8200

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 200 Volts CURRENT 8.0 Amperes

FEATURES

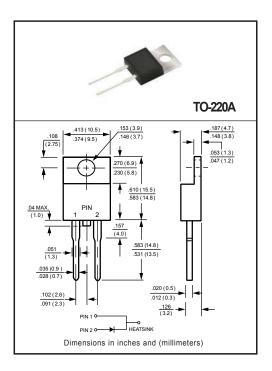
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High surge capabitity
- * High reliability

MECHANICAL DATA

- * Case: To-220A molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any * Weight: 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^{\circ}\text{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	SR820	SR830	SR835	SR840	SR845	SR850	SR860	SR880	SR8100	SR8150	SR8200	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	35	40	45	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	14	21	25	28	32	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	35	40	45	50	60	80	100	150	200	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	
Typical Thermal Resistance (Note 1)	R ₀ JC	2.5											°C/W
	R _{0JA}	60											
Typical Junction Capacitance (Note 3)	CJ	700 450								pF			
Operating Temperature Range	TJ	150										٥C	
Storage Temperature Range	T _{STG}	-55 to + 150											٥C

$\textbf{ELECTRICAL CHARACTERISTICS} (@ \texttt{TA=25} \ ^{\circ}\texttt{C} \ unless \ otherwise \ noted)$

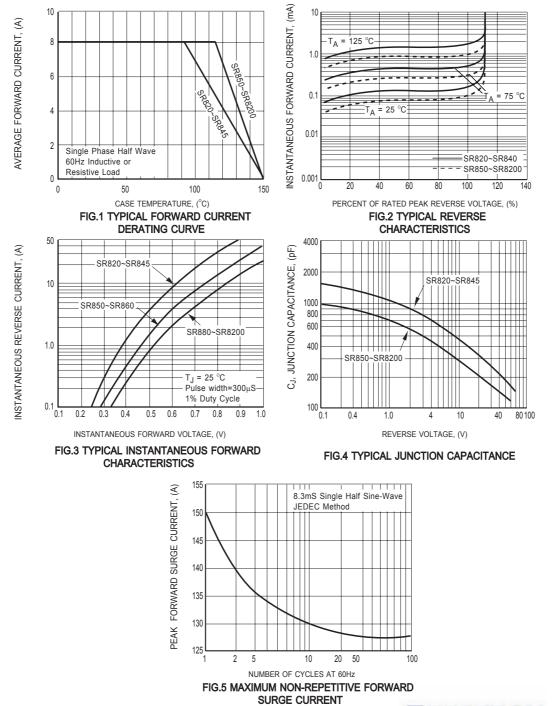
CHARACTERISTICS		SYMBOL	SR820	SR830	SR835	SR840	SR845	SR850	SR860	SR880	SR8100	SR8150	SR8200	UNITS
Maximum Instantaneous Forward Voltage	VF	.65 .75 .85						5	Volts					
Maximum Average Reverse Current	@T _A = 25°C	I _R	0.2										mΑ	
at Rated DC Blocking Voltage	@T _A = 100°C												mA	

NOTES: 1. Thermal Resistance: Heat-sink mounted.

- 2. Suffix "R" for Reverse Polarity.
 3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2006-11

RATING AND CHARACTERISTICS CURVES (SR820 THRU SR8200)





DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

