

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

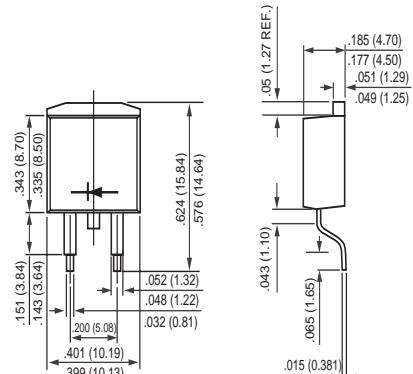
- * Case: D2PAK molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 2.2 grams

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%.



D2PAK



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SR820S	SR830S	SR835S	SR840S	SR845S	SR850S	SR860S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	35	40	45	50	60	Volts
Maximum RMS Voltage	V _{RMS}	14	21	25	28	32	35	42	Volts
Maximum DC Blocking Voltage	V _{dc}	20	30	35	40	45	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
Typical Thermal Resistance (Note 1)	R _{θJC}				2.5				°C/W
Typical Junction Capacitance (Note 3)	C _J		700			450			pF
Operating Temperature Range	T _J		-65 to + 125			-65 to + 150			°C
Storage Temperature Range	T _{STG}				-65 to + 150				°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SR820S	SR830S	SR835S	SR840S	SR845S	SR850S	SR860S	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	V _F			.65			.75		Volts
Maximum Average Reverse Current @ T _c = 25°C at Rated DC Blocking Voltage	I _R				5.0				mAmps
					50				mAmps

NOTES : 1. Thermal Resistance Junction to Case.

2. Suffix "R" for Reverse Polarity.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SR820S THRU SR860S)

