

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 8.0 Amperes

FEATURES

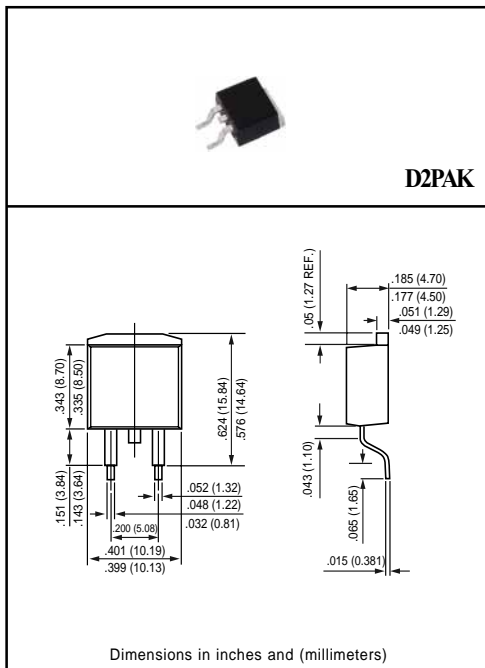
- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High surge capability
- * High reliability

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%.



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

| RATINGS | SYMBOL | SR820S | SR830S | SR835S | SR840S | SR845S | SR850S | SR860S | UNITS |
|---|--------|--------------|--------|--------|--------|--------|--------|--------------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum RMS Voltage | VRMS | 14 | 21 | 25 | 28 | 32 | 35 | 42 | Volts |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum Average Forward Rectified Current at Derating Case Temperature | IO | 8.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 150 | | | | | | | Amps |
| Typical Thermal Resistance (Note 1) | RθJC | 2.5 | | | | | | | °C/W |
| Typical Junction Capacitance (Note 3) | CJ | 700 | | | | | | 450 | pF |
| Operating Temperature Range | TJ | -65 to + 125 | | | | | | -65 to + 150 | °C |
| Storage Temperature Range | TSTG | -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 | VF | .65 | | | | | | .75 | Volts |
| Maximum Average Reverse Current | IR | 5.0 | | | | | | mAmps | |
| at Rated DC Blocking Voltage | | | | | | | | | |
| | | 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)

