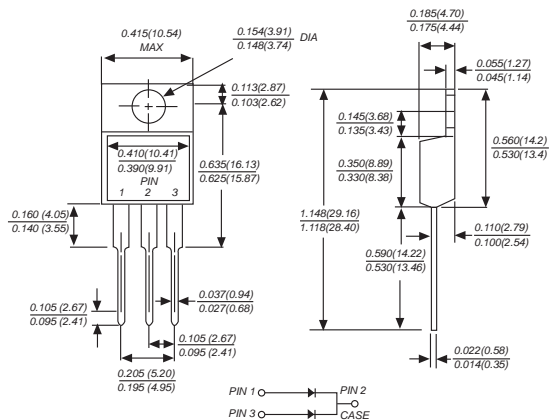


SR1520C THRU SR15A0C

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 15.0 Amperes

TO-220AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

MECHANICAL DATA

Case: TO-220AB molded plastic body
Terminals: Leads solderable per MIL-STD-750, Method 2026
Polarity: As marked
Mounting Position: Any
Weight: 0.080 ounce, 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 current derate by 20%.

| | SYMBOLS | SR 1520C | SR 1530C | SR 1540C | SR 1545C | SR 1550C | SR 1560C | SR 1570C | SR 1580C | SR 1590C | SR 15A0C | UNITS |
|---|------------|-------------|----------|----------|-------------|----------|----------|----------|----------|----------|----------|-------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | 100 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 32 | 35 | 42 | 49 | 56 | 63 | 70 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | 100 | VOLTS |
| Maximum average forward rectified current (see fig.1) | $I_{(AV)}$ | 15.0 | | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 150.0 | | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 7.5A | V_F | 0.65 | | | 0.75 | | | 0.85 | | | Volts | |
| Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ | I_R | 15.0 | | | 50.0 | | | | | | mA | |
| Typical junction capacitance (NOTE 1) | C_J | 300 | | | 250 | | | | | | pF | |
| Typical thermal resistance (NOTE 2) | R_{JC} | 2.0 | | | | | | | | | °C/W | |
| Operating junction temperature range | T_J | -65 to +125 | | | -65 to +150 | | | | | | °C | |
| Storage temperature range | T_{STG} | -65 to +150 | | | | | | | | | °C | |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SR1520C THRU SR15A0C

