

SR320 THRU SR3200

SCHOTTKY BARRIER RECTIFIER



康比電子
HORNBY ELECTRONIC

REVERSE VOLTAGE: 20 to 200 VOLTS
FORWARD CURRENT: 3.0 AMPERE

FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and porlarity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD

Epoxy: UL 94V-O rate flame retardant

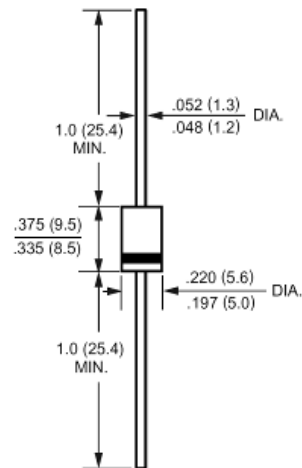
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.04ounce, 1.1gram

DO-201AD



Dimensions in inches and (millimeters)

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%.

| | Symbols | SR320 | SR330 | SR340 | SR350 | SR360 | SR380 | SR3100 | SR3150 | SR3200 | Units | |
|---|-----------------|-------------|-------|-------|-------|-------------|-------|--------|--------|--------|-------|------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts | |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | Volts | |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | Volts | |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length | $I_{(AV)}$ | 3.0 | | | | | | | | | Amp | |
| Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 80 | | | | | | | | | Amp | |
| Maximum Forward Voltage at 3.0A DC and 25°C | V_F | 0.55 | | | 0.7 | | 0.85 | | 0.95 | | Volts | |
| Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$ | I_R | 2.0 | | | | | 30 | | | | | mAmp |
| Typical Junction Capacitance (Note 1) | C_J | 200 | | | | | | | | | pF | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 40 | | | | | | | | | °C/W | |
| Operating Junction Temperature Range | T_J | -55 to +125 | | | | -55 to +150 | | | | | | °C |
| Storage Temperature Range | T_{stg} | -55 to +150 | | | | | | | | | °C | |

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient 0.375"(9.5mm) lead length P.C.B. Mounted

SR320 THRU SR3200

SCHOTTKY BARRIER RECTIFIER

RATINGS AND CHARACTERISTIC CURVES

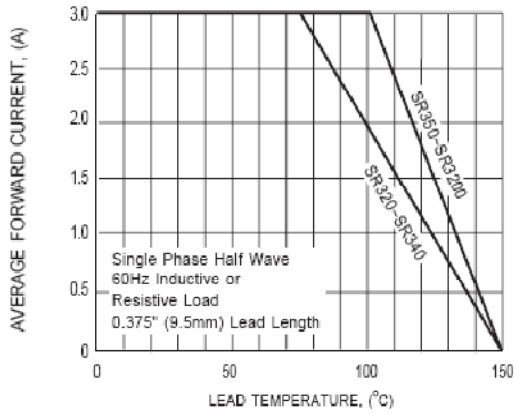


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

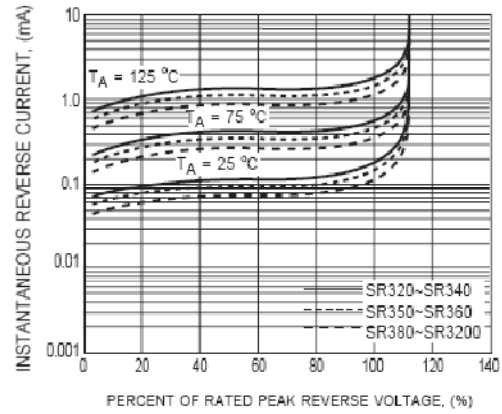


FIG.2 TYPICAL REVERSE CHARACTERISTICS

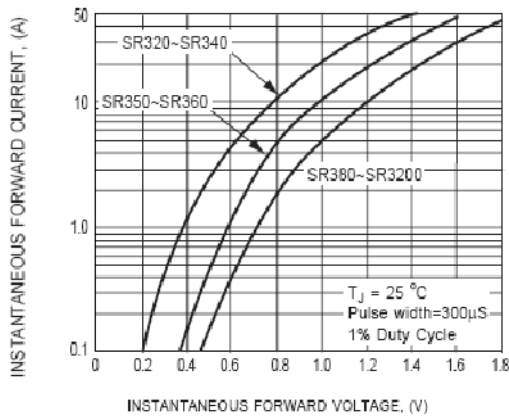


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

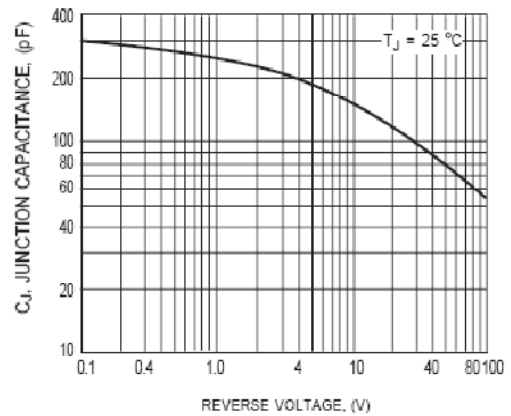


FIG.4 TYPICAL JUNCTION CAPACITANCE

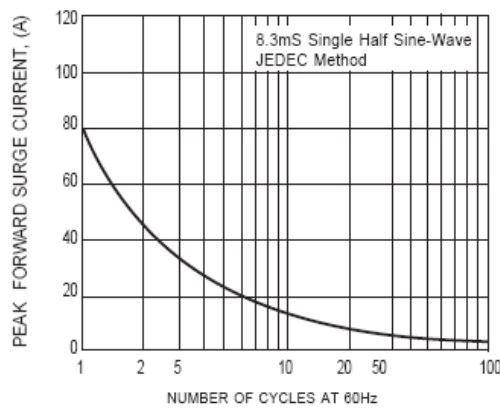


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT