# Zibo Seno Electronic Engineering Co., Ltd.

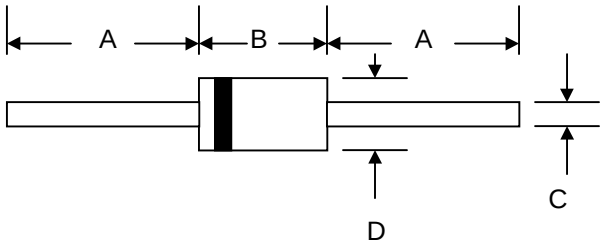
淄博圣诺

# SR330L – SR3200L

## 3.0A LOW VF SCHOTTKY BARRIER DIODE

## Features

- Low VF Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications




## Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

| DO-201AD | | |
|---|---|---|
| **Dim** | **Min** | **Max** |
| **A** | 24.5 | — |
| **B** | 7.20 | 9.50 |
| **C** | 1.10 | 1.30 |
| **D** | 5.00 | 5.60 |
| **All Dimensions in mm** | | |

## Maximum Ratings and Electrical Characteristics @$T_A$=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | SR330L | SR340L | SR345L | SR350L | SR360L | SR380L | SR3100L | SR3150L | SR3200L | Unit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 21 | 28 | 31.5 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Average Rectified Output Current @$T_L$ = 75°C (Note 1) | $I_O$ | 3.0 | | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 80 | | | | | | | | | A |
| Forward Voltage @$I_F$ = 3.0A | $V_{FM}$ | 0.45 | | | 0.5 | | 0.6 | | 0.85 | | V |
| Peak Reverse Current @$T_A$ = 25°C<br>At Rated DC Blocking Voltage @$T_A$ = 100°C | $I_{RM}$ | 0.5<br>10 | | | | | 0.05<br>5 | | | | mA |
| Typical Junction Capacitance (Note 2) | $C_j$ | 500 | | | | | 350 | | | | pF |
| Typical Thermal Resistance (Note 1) | $R_{\theta JA}$ | 25 | | | | | | | | | °C/W |
| Operating and Storage Temperature Range | $T_j$, $T_{STG}$ | -55 to +150 | | | | | | | | | °C |

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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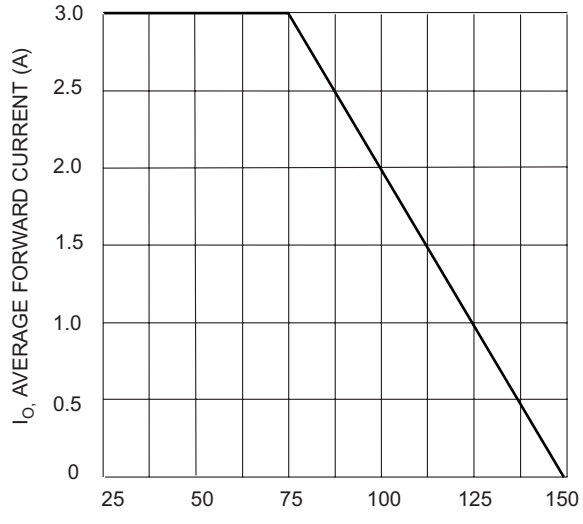



Fig. 1 Forward Current Derating Curve

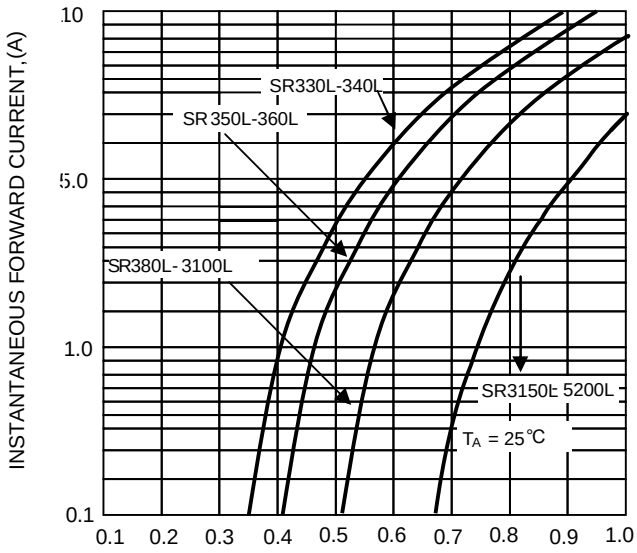
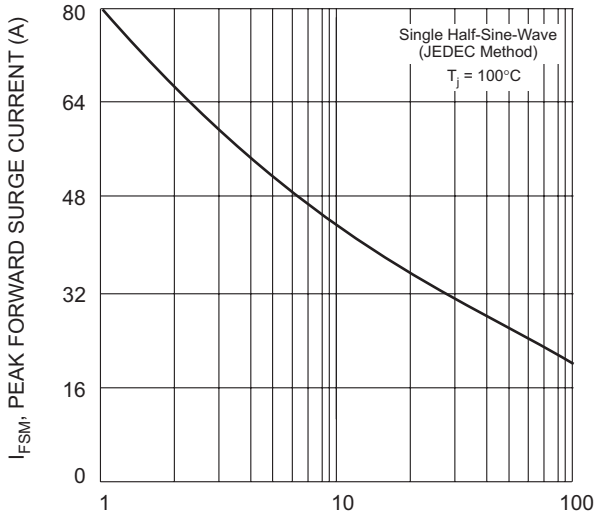
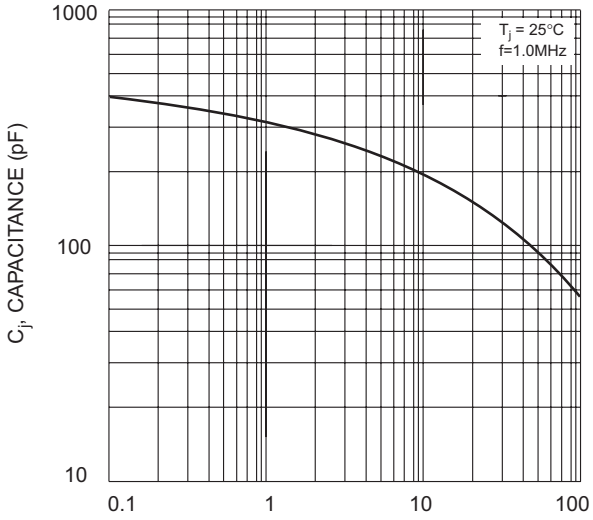



Fig. 2 INSTANTANEOUS FORWARD VOLTAGE, (V)



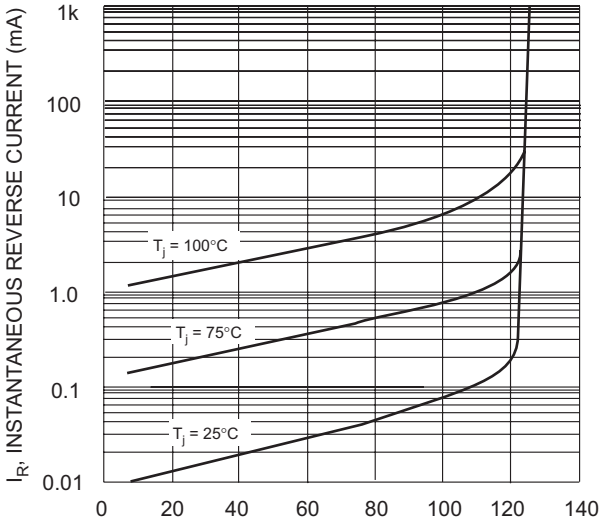

NUMBER OF CYCLES AT 60 Hz

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current




$V_R$, REVERSE VOLTAGE (V)

Fig. 4 Typical Junction Capacitance




PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

Fig. 5 Typical Reverse Characteristics