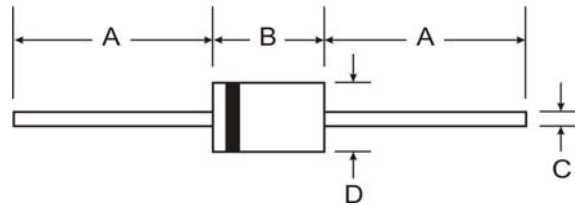


Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Lead Free Finish, RoHS Compliant (Note 2)



Mechanical Data

- Case: DO-35
- Case Material: Glass
- Moisture Sensitivity: Level 1 per J-STD-020C
- Leads: Solderable per MIL-STD-202, Method 208
- Terminals: Finish — Sn96.5Ag3.5. Solderable per MIL-STD-202, Method 208 (E3)
- Polarity: Cathode Band
- Marking Information: See Page 3
- Ordering Information: See Page 3
- Weight: 0.13 grams (approximate)

| DO-35 | | |
|----------------------|-------|------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | — | 4.00 |
| C | — | 0.60 |
| D | — | 2.00 |
| All Dimensions in mm | | |

Maximum Ratings @T_A = 25°C unless otherwise specified

| Characteristic | Symbol | SD103A | SD103B | SD103C | Unit |
|---|---------------------|-------------|--------|--------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 40 | 30 | 20 | V |
| Working Peak Reverse Voltage | V _{RWM} | | | | |
| DC Blocking Voltage | V _R | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 28 | 21 | 14 | V |
| Forward Continuous Current | I _{FM} | 350 | | | mA |
| Repetitive Peak Forward Current (Note 1) @ t ≤ 1.0s | I _{FRM} | 1.0 | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3 ms Half Sine Wave | I _{FSM} | 15 | | | A |
| Power Dissipation (Note 1) | P _d | 400 | | | mW |
| Thermal Resistance, Junction to Ambient Air (Note 1) | R _{θJA} | 300 | | | °C/W |
| Operating Junction Temperature | T _j | 125 | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | °C |

Electrical Characteristics @T_A = 25°C unless otherwise specified

| Characteristic | Symbol | Min | Typ | Max | Unit | Test Condition |
|---------------------------------------|--------------------|----------------|-----|--------------|------|--|
| Reverse Breakdown Voltage (Note 3) | V _{(BR)R} | 40 30 20 | — | — | V | I _R = 100μA |
| Maximum Forward Voltage Drop | V _{FM} | — | — | 0.37 0.60 | V | I _F = 20mA I _F = 200mA |
| Maximum Peak Reverse Current (Note 3) | I _{RM} | — | — | 5.0 | μA | V _R = 30V V _R = 20V V _R = 10V |
| Total Capacitance | C _T | — | 50 | — | pF | V _R = 0V, f = 1.0MHz |
| Reverse Recovery Time | t _{rr} | — | 10 | — | ns | I _F = I _R = 50mA to 200mA, I _{tr} = 0.1 x I _R , R _L = 100Ω |

- Notes:
1. Valid provided that device terminals are kept at ambient temperature.
 2. EC Directive 2002/95/EC (RoHS) revision 13.2.2003. Glass and high temperature solder exemptions applied where applicable, see EU Directive Annex Notes 5 and 7.
 3. Short duration test pulse used to minimize self-heating effect.

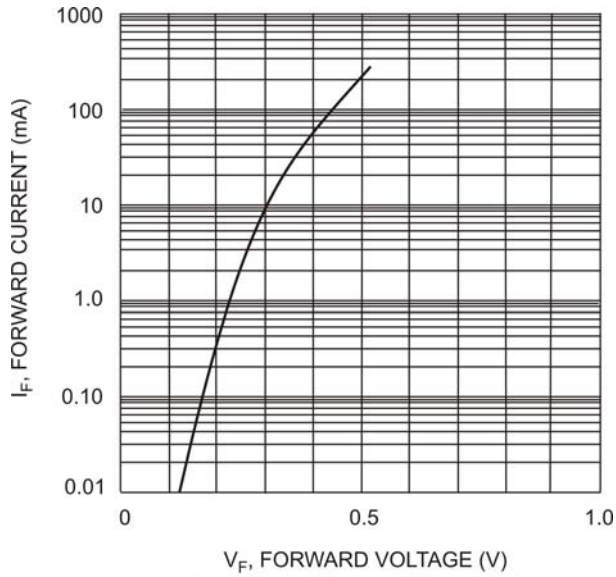


Fig. 1 Typical Forward Characteristics

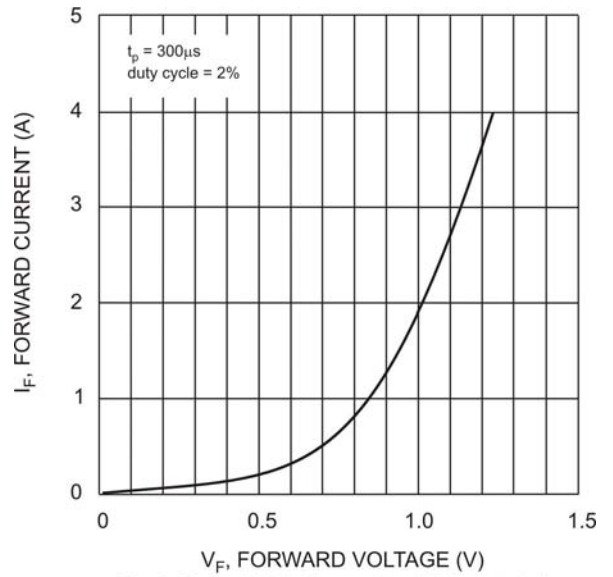


Fig. 2 Typical High Current Fwd Characteristics

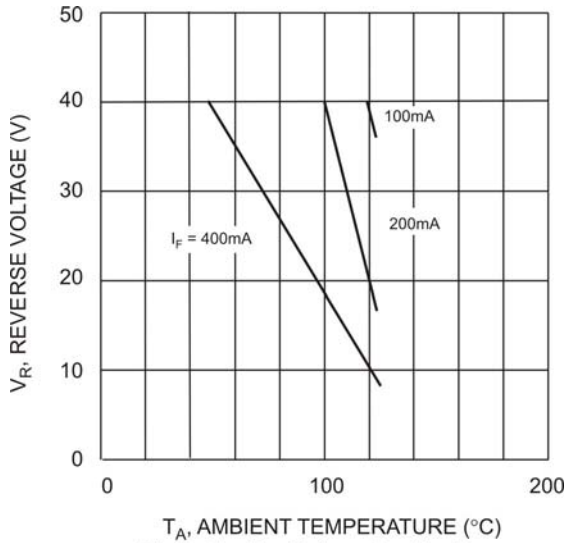


Fig. 3 Blocking Voltage Derating Curves

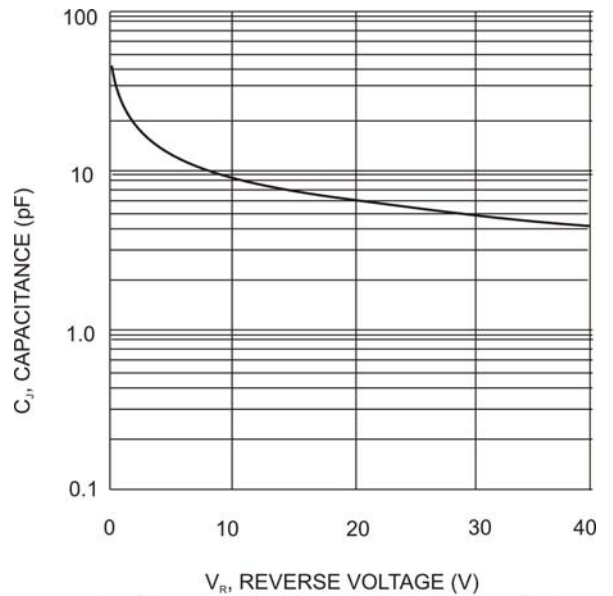


Fig. 4 Typ. Junction Capacitance vs Reverse Voltage

