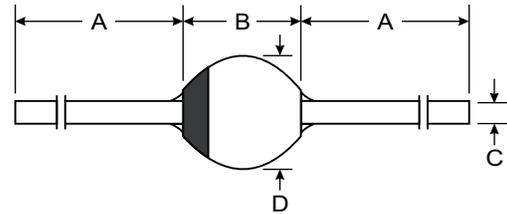


Features

- Hermetically Sealed Glass Body Construction
- Controlled Avalanche Characteristics
- Super-Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 90A Peak
- Low Reverse Leakage Current



Mechanical Data

- Case: SOD-64, Glass
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

| SOD-64 | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 26.0 | — |
| B | — | 4.2 |
| C | — | 1.35 |
| D | — | 4.3 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_j = 25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | BYV28/50 | BYV28/100 | BYV28/150 | BYV28/200 | Unit |
|---|-----------------|-------------|-----------|-----------|-----------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 50 | 100 | 150 | 200 | V |
| DC Blocking Voltage | V_R | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 100 | 140 | V |
| Non-Repetitive Peak Reverse Voltage | V_{RSM} | 55 | 110 | 165 | 220 | V |
| Average Rectified Output Current (Note 1) | I_O | 3.5 | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 90 | | | | A |
| Repetitive Forward Surge Current | I_{FRM} | 25 | | | | A |
| Forward Voltage @ $I_F = 5.0\text{A}$ | V_{FM} | 1.1 | | | | V |
| Peak Reverse Current @ $T_j = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j = 165^\circ\text{C}$ | I_{RM} | 1.0 150 | | | | μA |
| Non-Repetitive Reverse Avalanche Energy $I_R = 0.6\text{A}$ Inductive Load @ $T_j = 175^\circ\text{C}$ | E_{RSM} | 20 | | | | mJ |
| Reverse Recovery Time (Note 2) | t_{rr} | 30 | | | | ns |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R_{\theta JA}$ | 25 | | | | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +175 | | | | $^\circ\text{C}$ |

Notes: 1. Leads maintained at ambient temperature at a distance of 10mm from the case.
2. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $t_{rr} = 0.25\mu\text{s}$. See Figure 4.

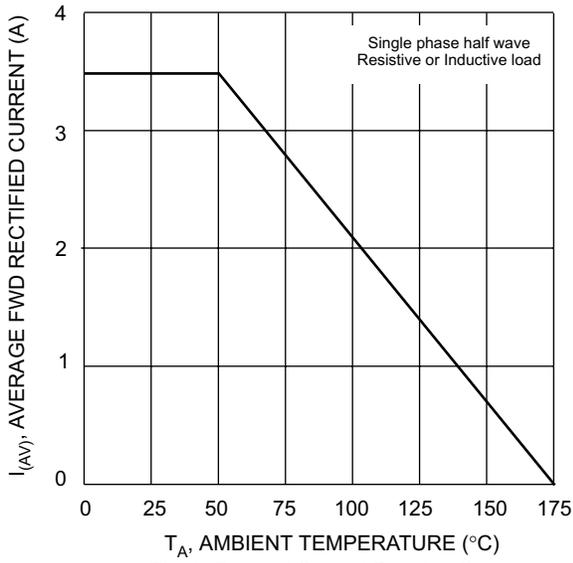


Fig. 1 Forward Current Derating Curve

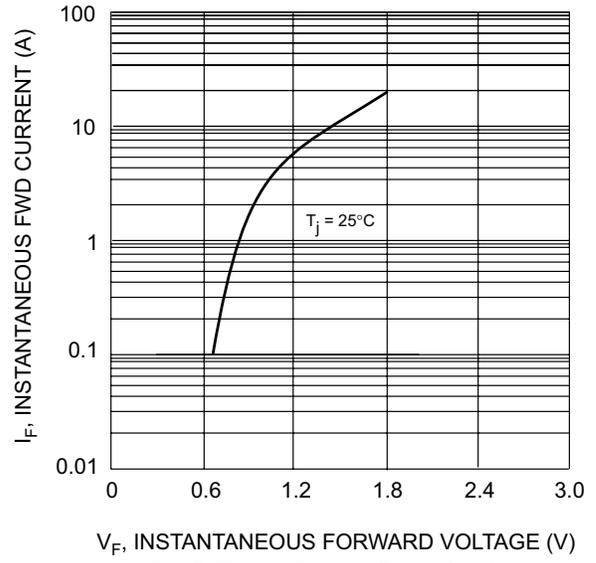


Fig. 2 Typical Forward Characteristics

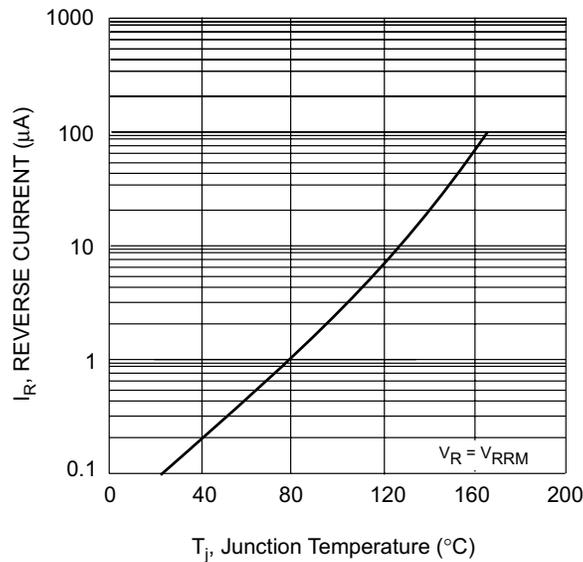


Fig. 3 Typical Reverse Characteristics

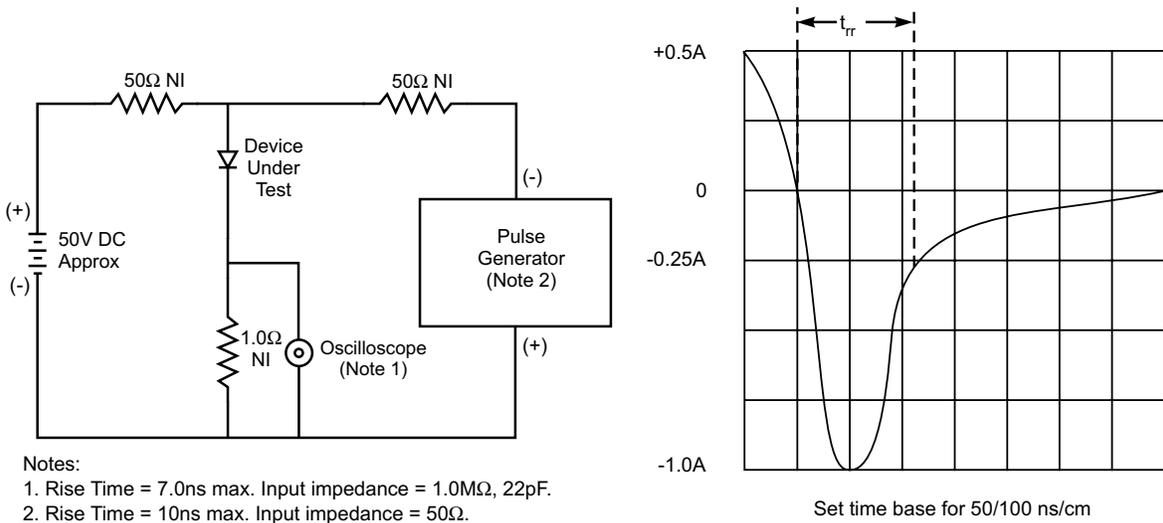


Fig. 4 Reverse Recovery Time Characteristic and Test Circuit