

Features

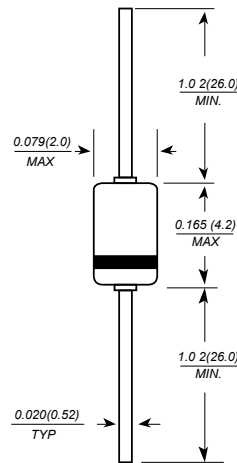
- For general purpose applications
- These diodes feature very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.

Mechanical Data

- Case: DO-35, glass case
- Polarity: Color band denotes cathode
- Weight: 0.004 ounces, 0.13 grams



DO-35(GLASS)



Dimensions in millimeters

Maximum Ratings and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Value | Unit |
|---|-----------------|--------------------|--------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 40 | V |
| Continuous Forward Current | I_F | 350 ⁽¹⁾ | mA |
| Repetitive Peak Forward Current at $t_p < 1s$, | I_{FRM} | 1 ⁽¹⁾ | A |
| Forward Surge Current at $t_p < 10ms$, | I_{FSM} | 7.5 ⁽¹⁾ | A |
| Power Dissipation, $T_a = 65\text{ }^\circ\text{C}$ | P_D | 330 ⁽¹⁾ | mW |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 300 ⁽¹⁾ | $^\circ\text{C/W}$ |
| Junction Temperature | T_J | 125 | $^\circ\text{C}$ |
| Ambient Operating Temperature Range | T_a | -65 to + 125 | $^\circ\text{C}$ |
| Storage temperature range | T_s | -65 to + 150 | $^\circ\text{C}$ |

Note: (1) Valid provided that leads at a distance of 4mm from case are kept at ambient temperature.

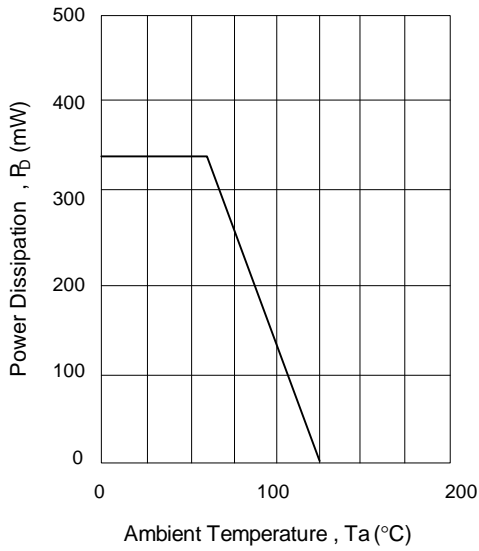
Electrical Characteristics ($T_J = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|--|-------------|---|-----|-----|------|---------------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | $I_R = 100\ \mu\text{A}$ (pulsed) | 40 | - | - | V |
| Reverse Current | I_R | $V_R = 10\ \text{V}$ | - | - | 2 | μA |
| Pulse Test $t_p < 300\ \mu\text{s}$, $\delta < 2\%$ | | $V_R = 20\ \text{V}$ | - | - | 5 | |
| | | $V_R = 40\ \text{V}$ | - | - | 25 | |
| Forward Voltage | V_F | $I_F = 1\ \text{mA}$ | - | - | 0.30 | V |
| Pulse Test $t_p < 300\ \mu\text{s}$, $\delta < 2\%$ | | $I_F = 10\ \text{mA}$ | - | - | 0.40 | |
| | | $I_F = 30\ \text{mA}$ | - | - | 0.50 | |
| | | $I_F = 100\ \text{mA}$ | - | - | 0.75 | |
| | | $I_F = 500\ \text{mA}$ | - | - | 0.90 | |
| Diode Capacitance | C_d | $V_R = 1\ \text{V}$, $f = 1\ \text{MHz}$ | - | 12 | - | pF |

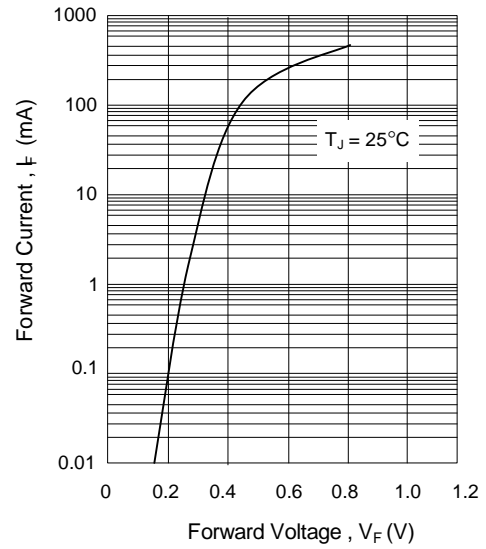


RATING AND CHARACTERISTIC CURVES (BAT48)

Admissible Power Dissipation vs. Ambient Temperature



Typical Forward Characteristics



Typical Reverse Characteristics

