

DB3-DB3TG

150mW Bi-directional Trigger Diodes

Features

- V_{BO} : 32V Version
- Low break-over current
- DO-35 package (JEDEC)
- Hermetically sealed glass
- Compression bonded construction
- All external surfaces are corrosion resistant and terminals are readily solderable
- RoHS compliant
- High reliability glass passivation insuring parameter stability and protection against junction contamination.
- Terminal: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed : 260°C/10 seconds



DO-35
Color Band Denotes Cathode

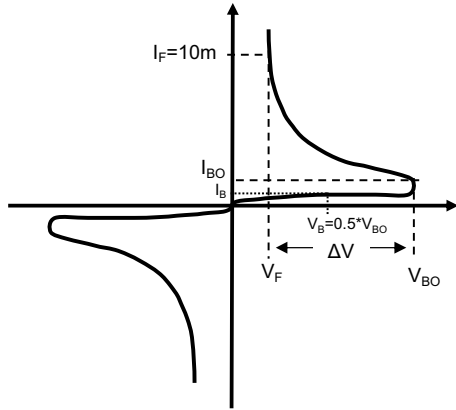
Absolute Maximum Ratings and Electrical Characteristics

| Symbol | Parameter | Value | | Units | |
|-----------------|---|-------------|-------------|---------|---------------|
| | | DB3 | DB3TG | | |
| V_{BO} | Break-over Voltage @ C=22nF | Min. | 28 | 30 | V |
| | | Typ. | 32 | 32 | V |
| | | Max. | 36 | 34 | V |
| $\pm V_{BO}$ | Break-over Voltage Symmetry @ C=22nF | Max. | ± 3 | ± 2 | V |
| I_{BO} | Break-over Current @ C=22nF | Max. | 100 | 15 | μA |
| ΔV | Dynamic Break-over Voltage @ I_{BO} to $I_F=10mA$ | Min. | 5 | 9 | V |
| I_B | Leakage Current @ $V_B=0.5V_{BO}(\text{Max.})$ | Max. | 10 | | μA |
| V_O | Output Voltage *see diagram 1 | Min. | 5 | | V |
| P_D | Power Dissipation | | 150 | | mW |
| I_{FRM} | Repetitive Peak Forward Current, Pulse Width=20 μ sec | | 2 | | A |
| $R_{\theta ja}$ | Typical Thermal Resistance, Junction to Ambient (Note1) | | 400 | | $^{\circ}C/W$ |
| T_J, T_{STG} | Junction and Storage Temperature Range | | -40 to +125 | | $^{\circ}C$ |

* Rating at 25°C ambient temperature unless otherwise specified.

* **Notes:** 1. Valid provided that electrodes are kept at ambient temperature

Typical Performance Characteristics



- V_{BO} : Break-Over Voltage
- I_{BO} : Break-Over Current
- ΔV : Dynamic Breakover Voltage
- I_B : Leakage Current at $V_B=0.5 \cdot V_{BO}$
- V_F : Voltage at Current $I_F=10mA$

Diagram 1 : Test circuit

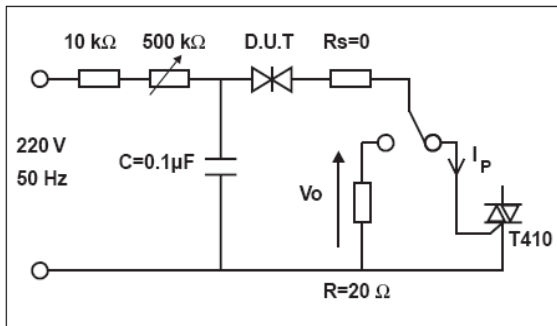


Figure 1. Admissible Power Dissipation Curve

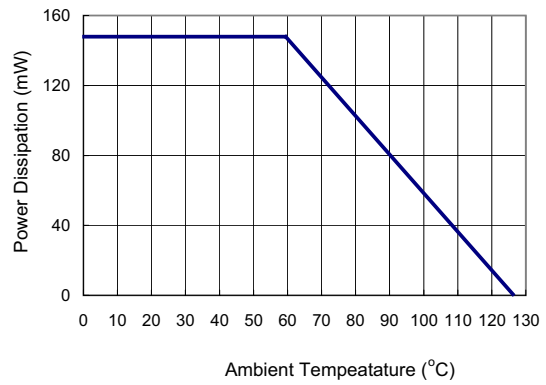


Figure 2. Relative Variation of VBO versus Junction Temperature

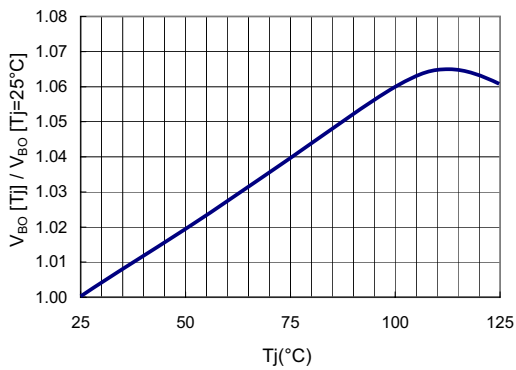
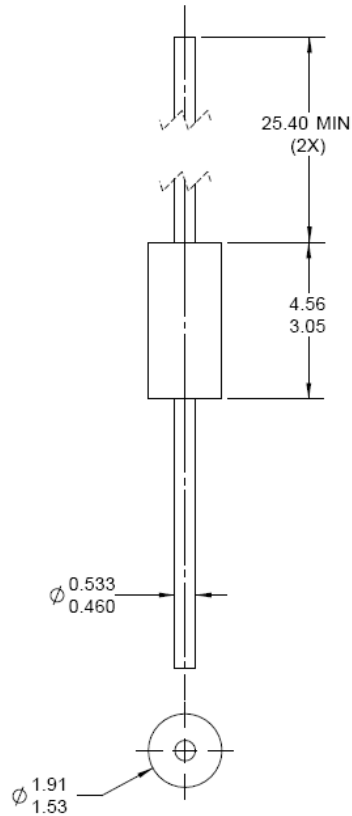


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)

Physical Dimensions

DO-35



NOTES: UNLESS OTHERWISE SPECIFIED

- A) PACKAGE STANDARD REFERENCE: JEDEC DO-204, VARIATION AH.
- B) HERMETICALLY SEALED GLASS PACKAGE.
- C) PACKAGE WEIGHT IS 0.137 GRAM.
- D) ALL DIMENSIONS ARE IN MILLIMETERS.
- E) DRAWING FILE NAME: DO35AREV02

Dimensions in Millimeters



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