

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

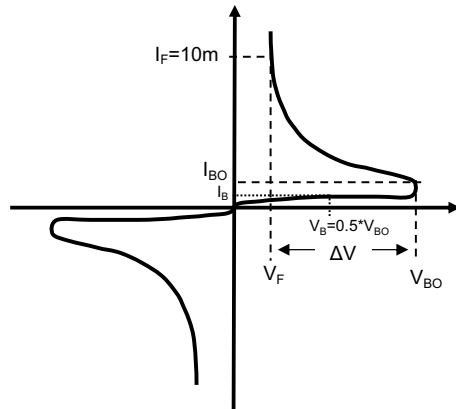
Absolute Maximum Ratings and Electrical Characteristics

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		°C/W
T_J, T_{STG}	Junction and Storage Temperature Range		-40 to +125		°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

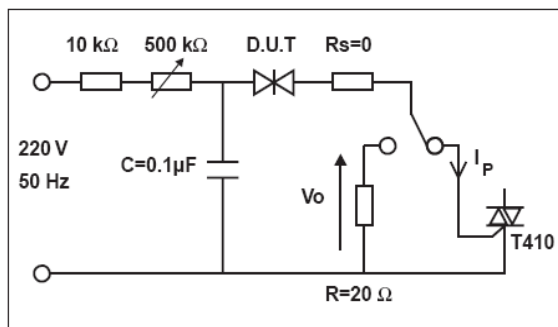


Figure 2. Relative Variation of VBO versus Junction Temperature

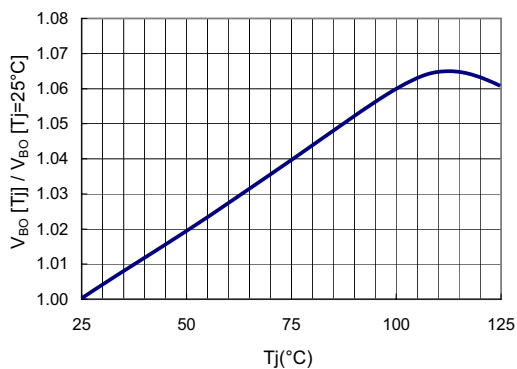
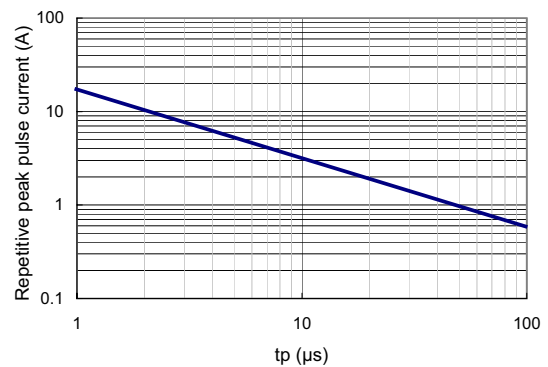
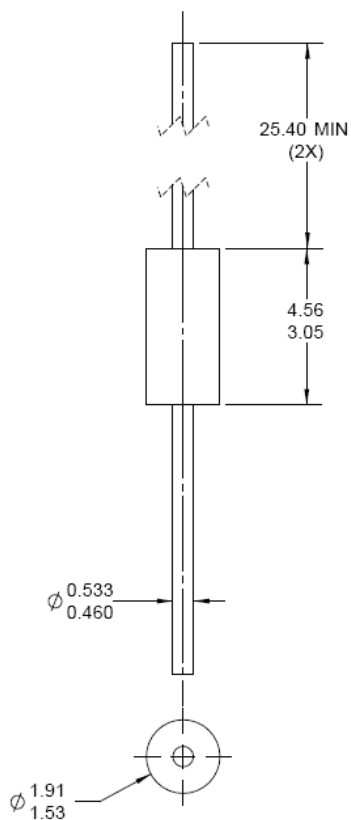


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)



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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