

# 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

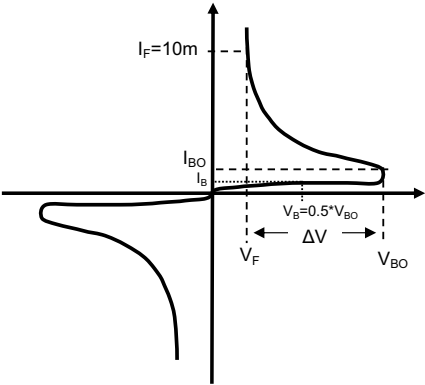
### Absolute Maximum Ratings and Electrical Characteristics

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.	$\pm 3$	$\pm 2$	V
$I_{BO}$	Break-over Current @ $C=22nF$	Max.	100	15	$\mu A$
$\Delta V$	Dynamic Break-over Voltage @ $I_{BO}$ to $I_F=10mA$	Min.	5	9	V
$I_B$	Leakage Current @ $V_B=0.5V_{BO}(Max.)$	Max.	10		$\mu A$
$V_O$	Output Voltage *see diagram 1	Min.	5		V
$P_D$	Power Dissipation		150		mW
$I_{FRM}$	Repetitive Peak Forward Current, Pulse Width=20 $\mu$ 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
- $\Delta V$  : Dynamic Breakover Voltage
- $I_B$  : Leakage Current at  $V_B=0.5*V_{BO}$
- $V_F$  : Voltage at Current  $I_F=10mA$

Diagram 1 : Test circuit

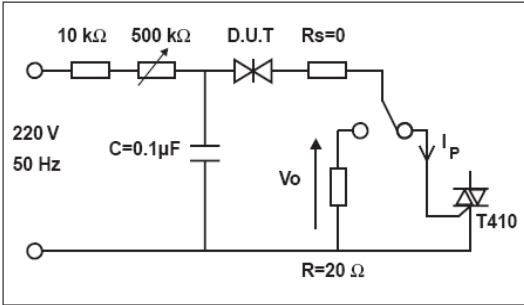


Figure 1. Admissible Power Dissipation Curve

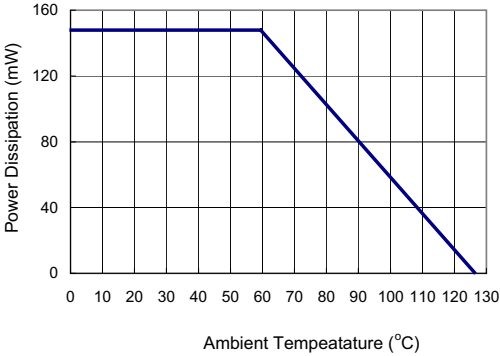


Figure 2. Relative Variation of VBO versus Junction Temperature

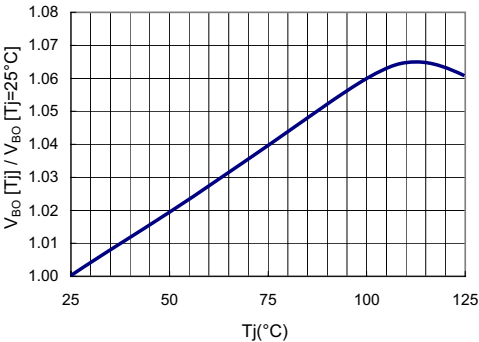
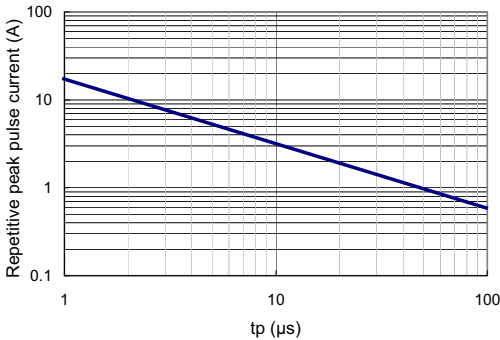
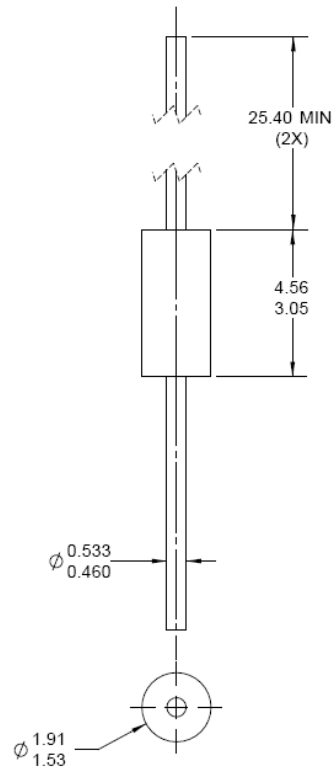


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)



# 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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