



## 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

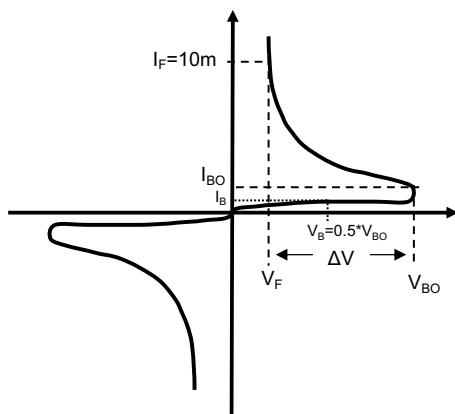
### Absolute Maximum Ratings and Electrical Characteristics

Symbol	Parameter	Value		Units
		DB3	DB3TG	
$V_{BO}$	Break-over Voltage @ C=22nF	<b>Min.</b>	28	V
		<b>Typ.</b>	32	V
		<b>Max.</b>	36	V
$\pm V_{BO}$	Break-over Voltage Symmetry @ C=22nF	<b>Max.</b>	$\pm 3$	V
$I_{BO}$	Break-over Current @ C=22nF	<b>Max.</b>	100	$\mu A$
$\Delta V$	Dynamic Break-over Voltage @ $I_{BO}$ to $I_F=10mA$	<b>Min.</b>	5	V
$I_B$	Leakage Current @ $V_B=0.5V_{BO}$ (Max.)	<b>Max.</b>	10	$\mu A$
$V_O$	Output Voltage *see diagram 1	<b>Min.</b>	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	$^{\circ}C/W$
$T_J, T_{STG}$	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  
 $\Delta V$  : 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

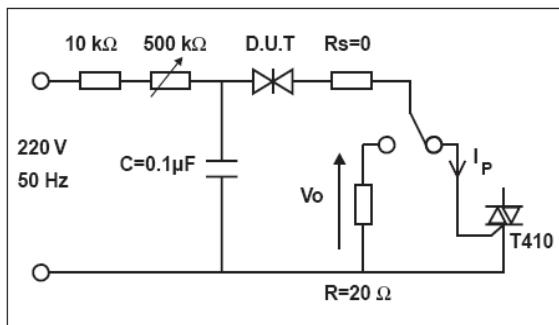


Figure 1. Admissible Power Dissipation Curve

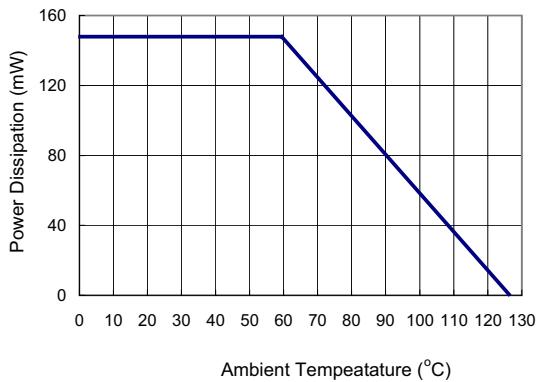


Figure 2. Relative Variation of  $V_{BO}$  versus Junction Temperature

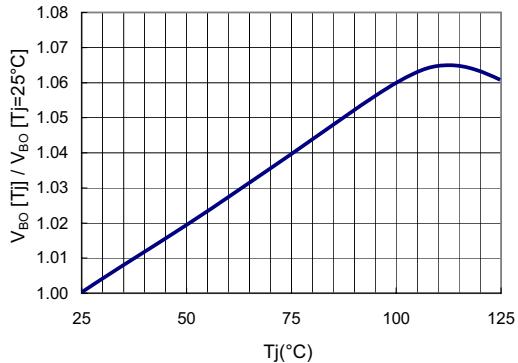
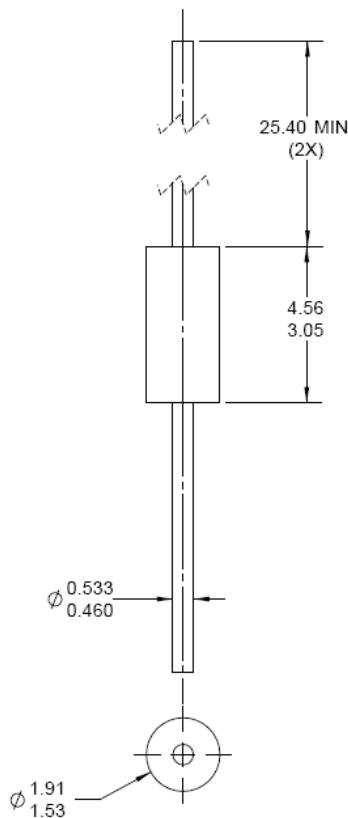


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)

## 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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