

## TRIGGER DIODES

### FEATURES

- \*  $V_{BO}$ : 32V/34V/40V VERSIONS
- \* Low Breakover Current

### DESCRIPTION

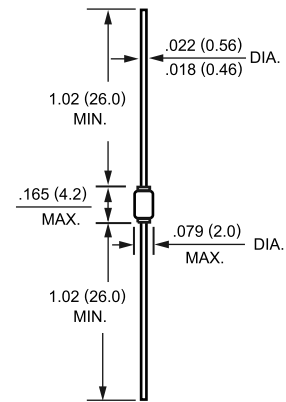
High reliability glass passivation insuring parameter stability and protection against junction contamination

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**DO-35**



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Repetitive Peak On-State Current $t_p=20\mu\text{s}, F=100\text{Hz}$	$I_{TRM}$	2	A
Power Dissipation (@ $T_A=50^\circ\text{C}$ )	P	150	mW
Derate Above $+50^\circ\text{C}$		4.0	mW/ $^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-40 to + 125	$^\circ\text{C}$
Junction Temperature	$T_J$	125	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATING	SYMBOL	VALUE				UNITS
		DB3-1		DB3-2		
		Min	Max	Min	Max	
Breakover Voltage(Forward and Reverse) at I <sub>BO</sub> ,C=22nF**	V <sub>BO</sub>	30	34	28	36	Volts
Maximum Breakover Voltage Symmetry delta V <sub>BO</sub> = +V <sub>BO</sub>  - V <sub>BO</sub>   C=22nF	delta V <sub>BO</sub>	+/-2				Volts
Minimum Dynamic Breakover Voltage delta I=I <sub>BO</sub> to I <sub>F</sub> =10mA (see Fig3)	delta V+/-	5				Volts
Minimum Output Voltage* (see Fig 2)	V <sub>O</sub>	5				Volts
Peak Breakover Current at Breakover Voltage* C=22nF**	I <sub>BO</sub>	25		100		uA
Rise Time* (see Fig3)	t <sub>r</sub>	1.5				uS
Leakage Current* V <sub>B</sub> =0.5V <sub>BO</sub> max (see Fig1)	I <sub>B</sub>	10				uA

NOTES: 1. \*Electrical characteristic applicable in both forward and reverse directions.

2.\*\*Connected in parallel with the devices.

3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

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RATING AND CHARACTERISTICS CURVES ( DB3 )

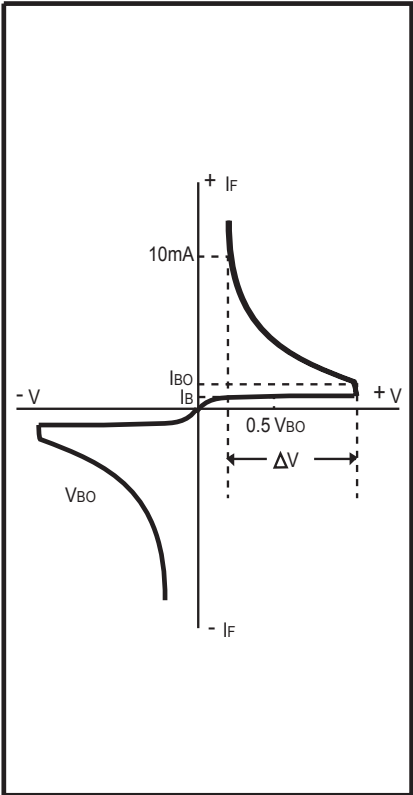


FIG.1 Current-voltage characteristics

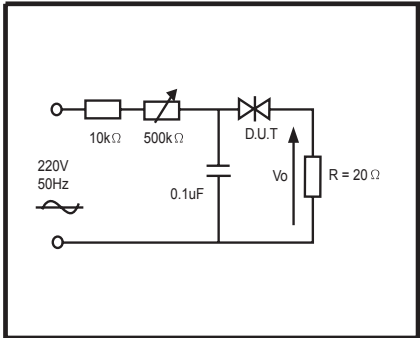


FIG.2 Test circuit for output voltage

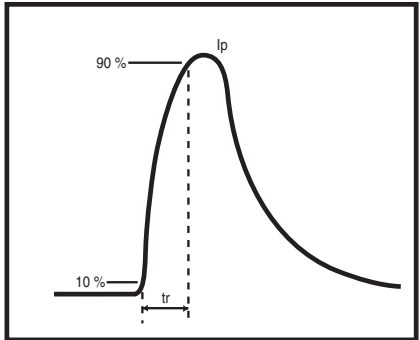
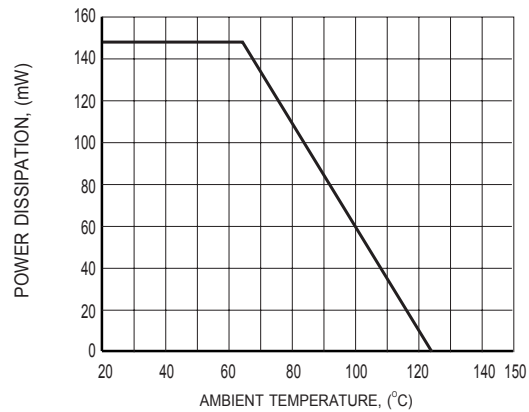
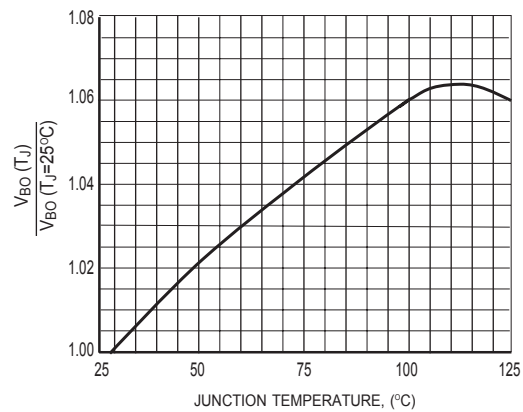


FIG.3 Test circuit see Fig.2  
Adjust R for  $I_p=0.5A$

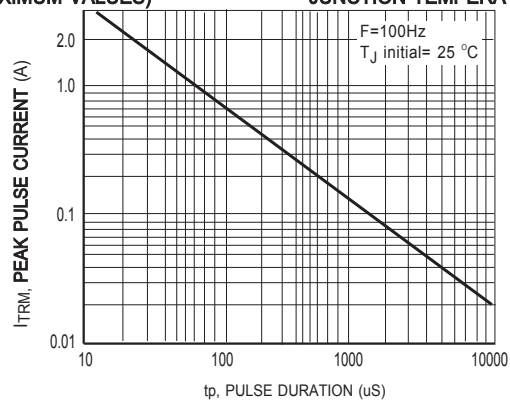
## RATING AND CHARACTERISTICS CURVES ( DB3 )



**FIG.4 POWER DISSIPATION VERSUS AMBIENT TEMPERATURE (MAXIMUM VALUES)**



**FIG.5 RELATIVE VARIATION OF  $V_{BO}$  VERSUS JUNCTION TEMPERATURE (TYPICAL VALUES)**



**FIG.6 PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)**

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