

DB3-DB3TG

350mW Bi-directional trigger diodes

DO-35

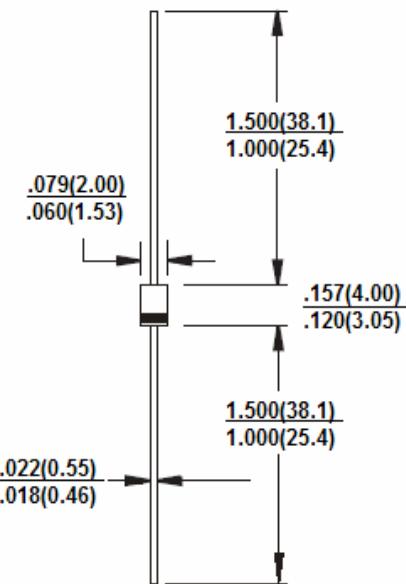


RoHS
COMPLIANCE



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



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	DB3	DB3TG	Units
Typical Break-over voltage @ C=22nF	V _{BO}	32	32	V
Break-over voltage symmetry @ C=22nF	+/- V _{BO}	+/- 3	+/- 2	V
Minimum Dynamic Break-over voltage @ I _{BO} to I _F =10mA	V _{DC}	5		V
Minimum output voltage	V _O	5		V
Power dissipation on printed circuit (L=10mm) Ta=65°C	P	350		mW
Repetitive peak on-state current T _p =20uS, F=100Hz	I _{TRM}	2		A
Break-over current @ C=22nF	I _{BO}	100	15	uA
Typical Rise time	T _r	1.5		uS
Maximum leakage current @ V _B =0.5 V _{BO} Max	I _B	10		uA
Typical Thermal Resistance	R _{θJA} R _{θJL}	400 300		°C/W
Operating Temperature Range	T _J	-40 to +125		°C
Storage Temperature Range	T _{STG}	-40 to +125		°C

Notes: 1. Electrical characteristics applicable in both forward and reverse directions.

2. Connected in parallel with the devices

Diagram 1 : Current-voltage characteristics

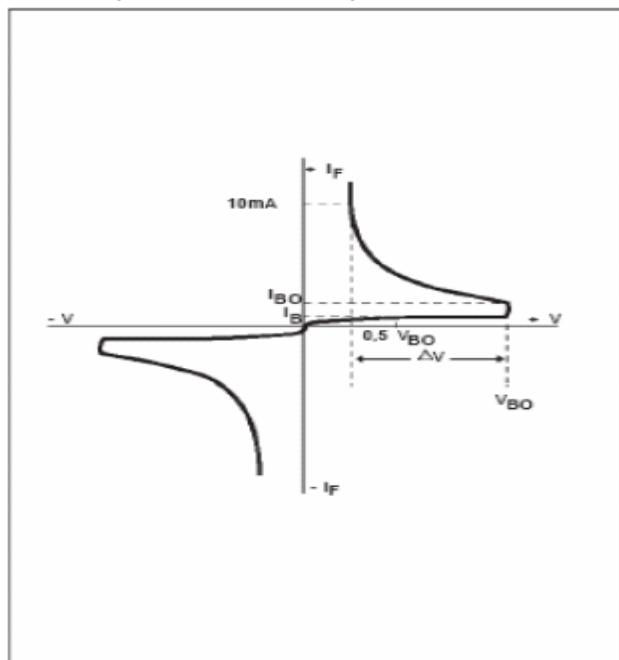


Diagram 2 : Test circuit for output voltage

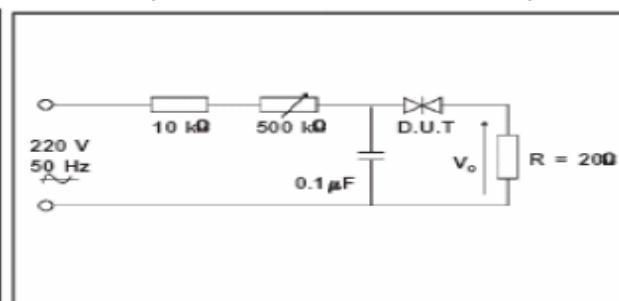


Diagram 3 : Test circuit see diagram 2 adjust R for $I_p=0.5A$

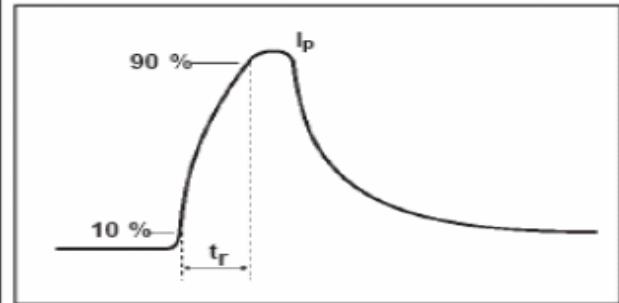


FIG 1 Power Dissipation Vs Ambient Temperature (Maximum)

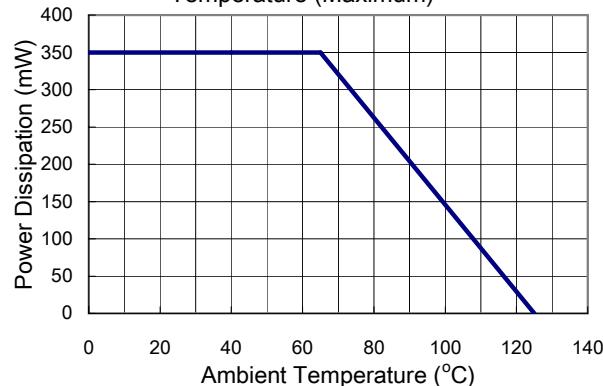


FIG 2 Relative Variation of V_{BO} vs Junction Temperature (Typical).

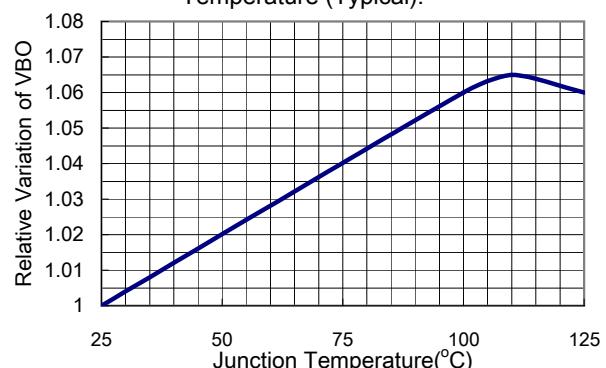


FIG 3 Peak Pulse Current vs Pulse duration

