

Small Signal Product

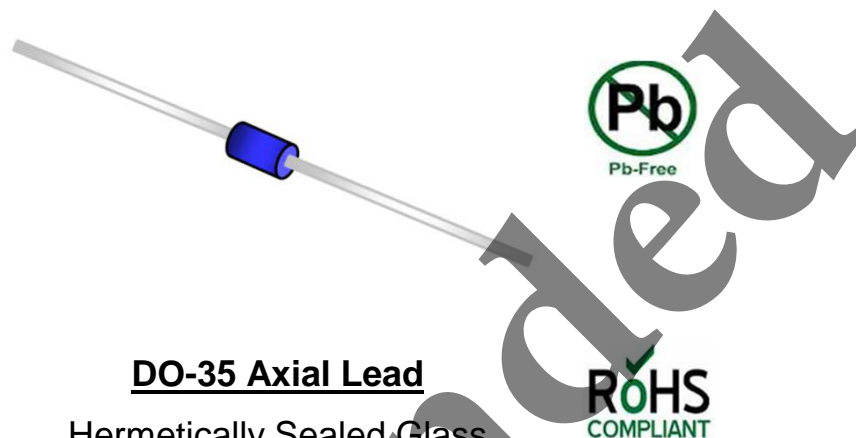
150mW Bi-directional Trigger Diode

FEATURES

- Designed for through-hole device type mounting
- Hermetically sealed glass
- High reliability glass passivation insuring parameter stability and protection against junction contamination
- All external surfaces are corrosion resistant and terminals are readily solderable

MECHANICAL DATA

- Case: DO-35 Solder Hot Dip Tin (Sn) lead finish
- High temperature soldering guaranteed: 260°C/10s
- Weight: 0.1255 mg (approximately)
- Terminal: Pure tin plated, lead free, solderable per MIL-STD-202, method 208 guaranteed
- Pb free and RoHS compliant



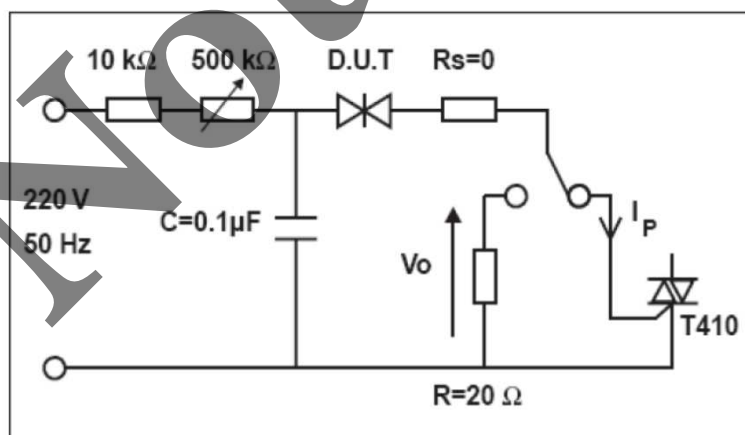
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Forward Current Pulse Width = 20 μ s	I_{FRM}	2	A
Power Dissipation	P_D	150	mW
Thermal Resistance (Junction to Ambient) (Note)	$R_{\theta JA}$	400	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	- 40 to + 125	$^\circ\text{C}$

Notes: Valid provided that electrodes are kept at ambient temperature

PARAMETER	SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Break-Over Voltage DB3	V_{BO}	28	32	36	C=22nF	V
DB3TG		30	32	34		
Break-Over Voltage Symmetry DB3	$+/-V_{BO}$			± 3	C=22nF	V
DB3TG				± 2		
Dynamic Breakdown Voltage DB3	ΔV	5			I_{BO} to $I_F=10\text{mA}$	V
DB3TG		9				
Output Voltage	V_O	5			(Note)	V
Leakage Current	I_B			10	$V_B = 0.5V_{BO}$ (Max)	μA
Break-Over Current DB3	I_{BO}			100	C=22nF	μA
DB3TG		-		15		

Notes: Test Circuit



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RATINGS AND CHARACTERISTICS CURVES

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

Fig. 1 Admissible Power Dissipation Curve

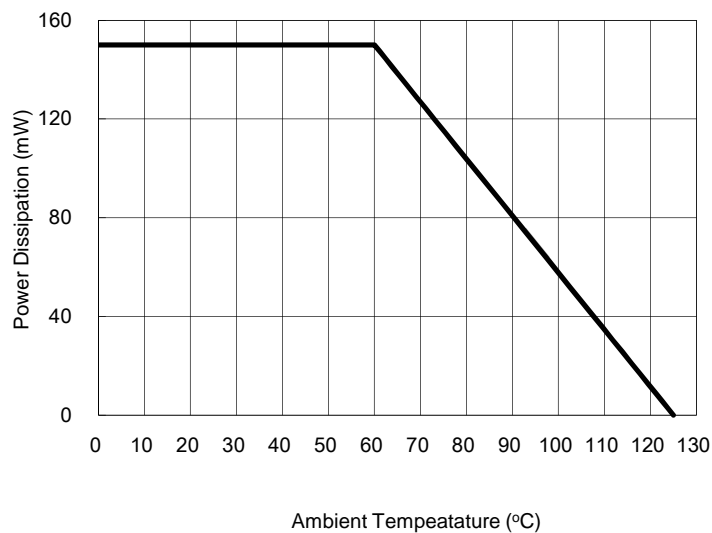


Fig. 2 Relative Variation of VBO VS. Junction Temperature (Typical Values)

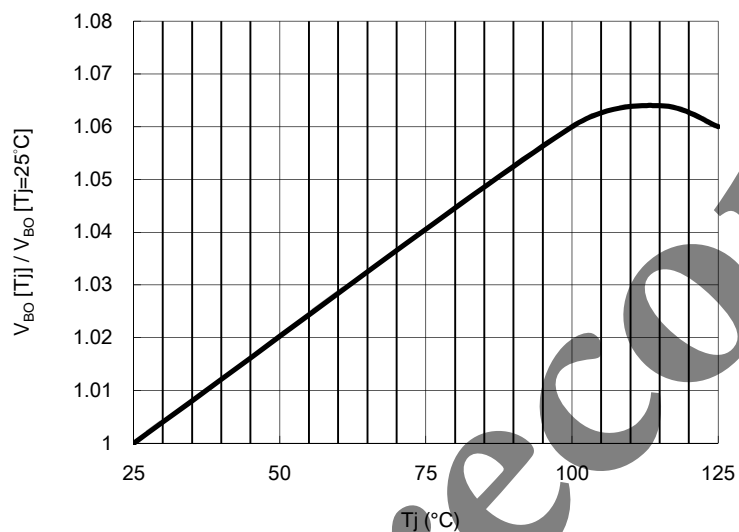
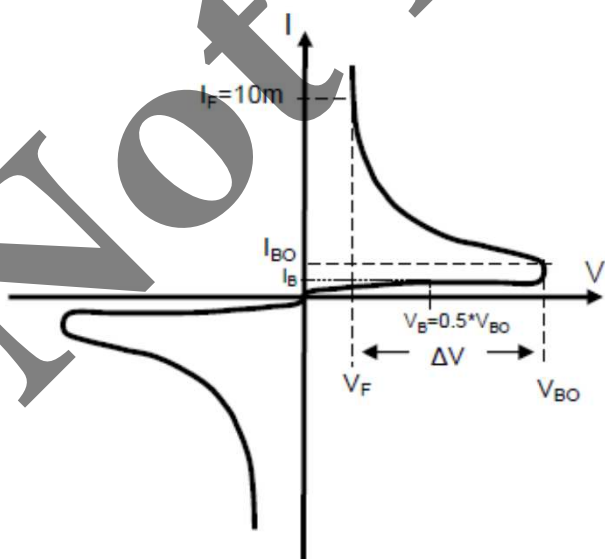
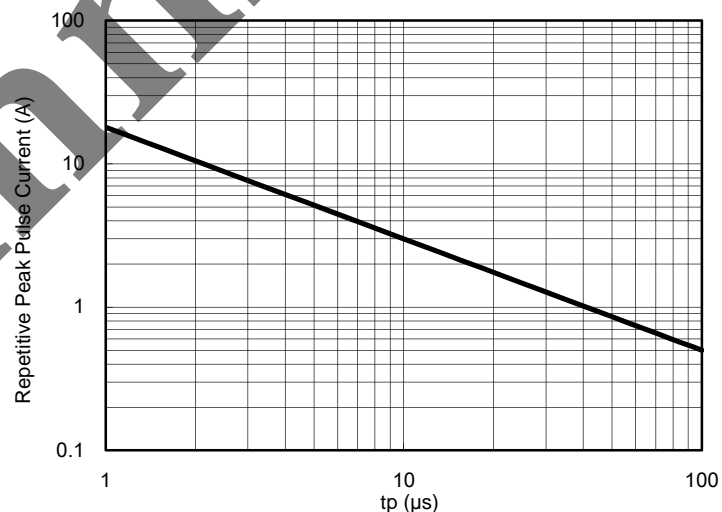


Fig. 3 Repetitive Peak Pulse Current VS. Pulse Duration (Maximum Values)



- 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 $I_F=10\text{mA}$

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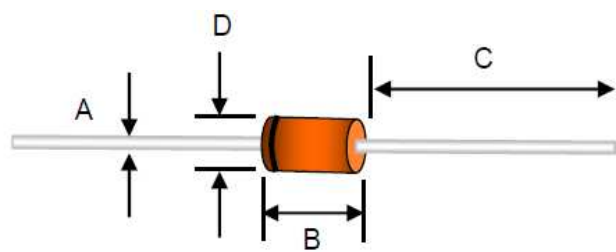
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE (Note)	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
DB3		RI	G	DO-35	5K / 10" Reel	DB3
DB3TG		RI	G	DO-35	5K / 10" Reel	DB3TG

Note: Indicator of manufacturing site for manufacture special control, if empty means no special control requirement

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
DB3 RIG	DB3		RI	G	Green compound
DB3-N0 RIG	DB3	N0	RI	G	Green compound

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PACKAGE OUTLINE DIMENSIONS
DO-35



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.34	0.60	0.013	0.024
B	2.90	5.08	0.114	0.200
C	25.40	38.10	1.000	1.500
D	1.30	2.28	0.051	0.090

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