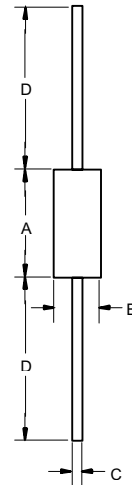


DB3TG

SILICON BIDIRECTIONAL DIAC

DO-35G



Features

- The three layer, two terminal, axial lead, hermetically sealed diacs are designed specifically for triggering thyristors.
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Moisture Sensitivity: Level 1 per J-STD-020C
- Intended for use in thyristors phase control , circuits for lamp dimming, universal motor speed control ,and heat control.

Maximum Ratings

- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +125°C
- Thermal Resistance Junction to Lead: 167°C/W
- Thermal Resistance Junction to Ambient: 400°C/W

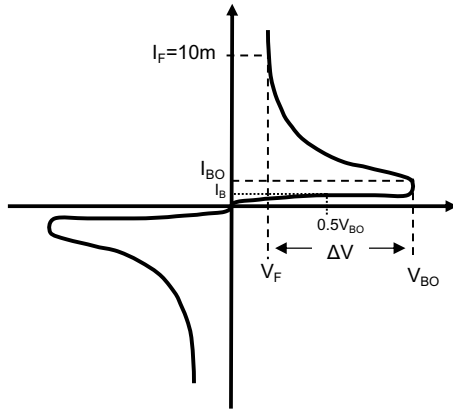
Electrical Characteristics @25°C Unless Otherwise Specified

Power dissipation on Printed Circuit (l=10mm)	P_C	150mW	$T_A=65^\circ\text{C}$
Repetitive Peak on-state Current	I_{TRM}	2.0A	$t_p=10\mu\text{s}, f=120\text{Hz}$
Breakover Voltage	V_{BO}	Min Typ Max 30 32 34V	$C=22\text{nF}$ (Note 3)
Breakover Voltage Symmetry	$ +V_{BO} $ $- -V_{BO} $	$\pm 2\text{V}$	$C=22\text{nF}$ (Note 3)
Output Voltage(Note 2)	$V_{o(\text{min})}$	5V	
Dynamic breakover voltage (N o t e 2)	ΔV	9V(Min)	V_{BO} and V_F at 10mA
Breakover Current(Note 2)	$I_{BO(\text{max})}$	15uA	$C=22\text{nF}$
Rise Time(Note 2)	T_r	2us(max)	
Leakage Current(Note 2)	$I_{B(\text{max})}$	10uA	$V_B=0.5V_{BO(\text{max})}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.150	---	3.8	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.083	---	27.50	---	

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.
 2. Electrical characteristics applicable in both forward and reverse directions.
 3. Connected in parallel with the devices.

Typical Performance Characteristics



- V_{BO} : Break-Over Voltage
- I_{BO} : Break-Over Current
- ΔV : 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

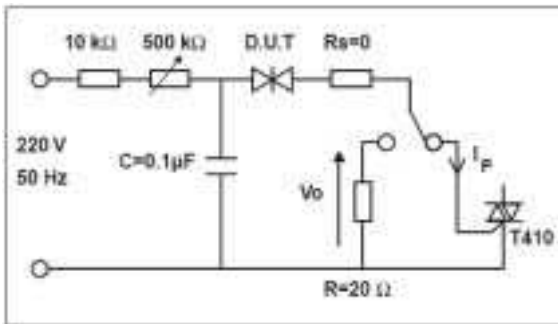


Figure 1. Admissible Power Dissipation Curve

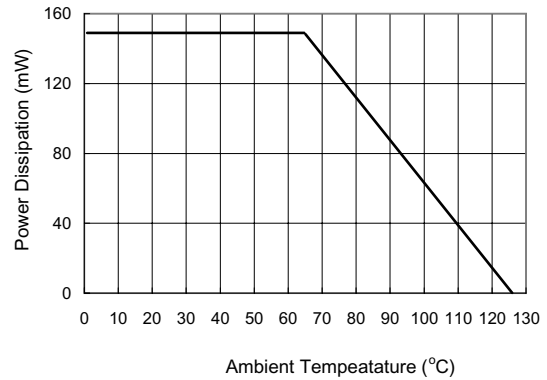


Figure 2. Relative Variation of VBO versus Junction Temperature

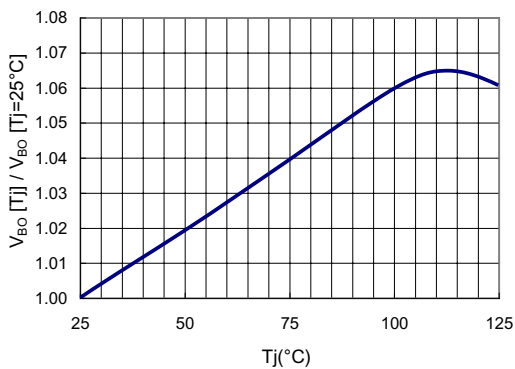
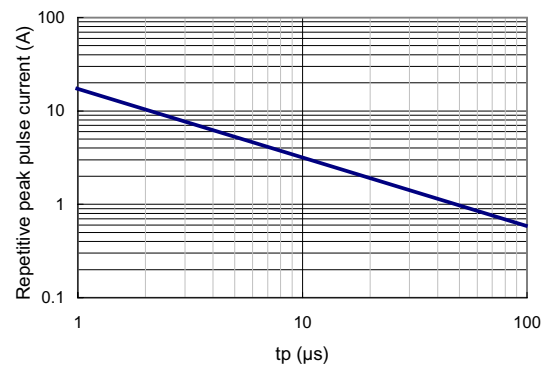


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)





Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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