Micro Commercial Components

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DB3TG

SILICON BIDIRECTIONAL DIAC

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 thyrisitors phase control , circuits for lamp dimming, universal motor speed control ,and heat control.

Maximum Ratings

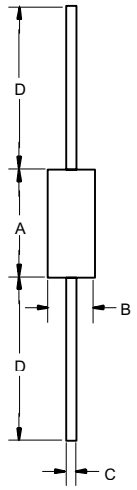
- Operating Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +125°C
- Thermal Resistance Junction to Lead:167℃/W
- Thermal Resistance Junction to Ambient: 400℃/W

Electrical Characteristics @25°C Unless Otherwise Specified

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

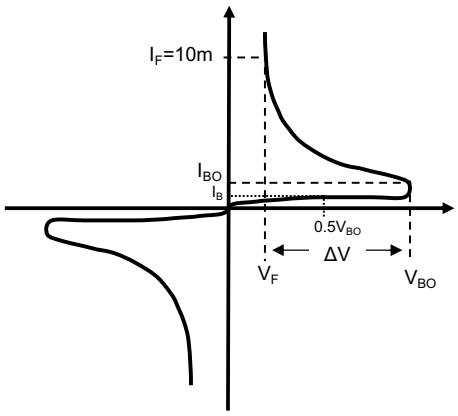
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.
2. Electrical characteristics applicable in both forward and reverse directions.
3. Connected in parallel with the devices.

DO-35G



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

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

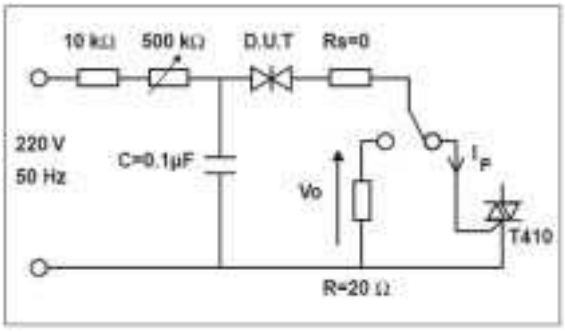


Figure 1. Admissible Power Dissipation Curve

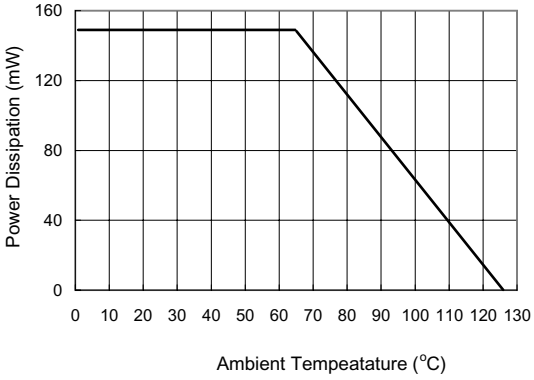


Figure 2. Relative Variation of VBO versus Junction Temperature

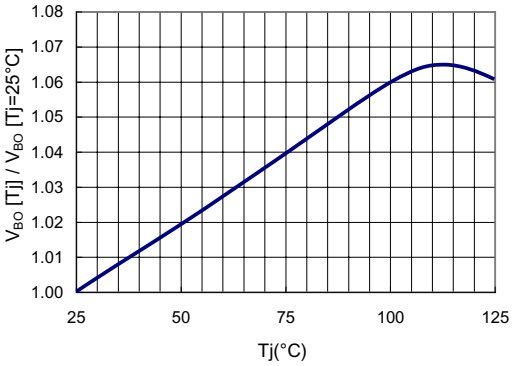
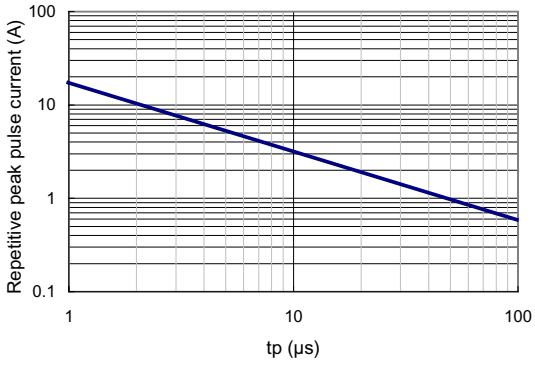


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)



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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