

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
- These diacs are intended for use in thyristors phase control , circuits for lamp dimming, universal motor speed control ,and heat control. Type number is marked.

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($l=10\text{mm}$)	P_C	150mW	$T_A=65^\circ\text{C}$
Repetitive Peak on-state Current DB3,DC34,DB4	I_{TRM}	2.0A	$t_p=10\text{us}$, $f=100\text{HZ}$
Breakover Voltage DB3 DC34 DB4	V_{BO}	Min Typ Max 28 32 36V 30 34 38V 35 40 45V	$C=22\text{nF}$ (Note 3)
Dynamic Breakover Voltage(Note 2)	ΔV	5V(Min.)	V_{BO} and V_F at 10mA
Breakover Voltage Symmetry DB3, DC34, DB4	$ +V_{BO} $ $- V_{BO} $	$\pm 3\text{V}$	$C=22\text{nF}$ (Note 3)
Output Voltage(Note 2)	$V_o(\text{min})$	5V	
Breakover Current(Note 2)	$I_{BO(\text{max})}$	100uA	$C=22\text{nF}$
Rise Time(Note 2)	T_r	1.5us	
Leakage Current(Note 2)	$I_{B(\text{max})}$	10uA	$V_B=0.5V_{BO(\text{max})}$

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

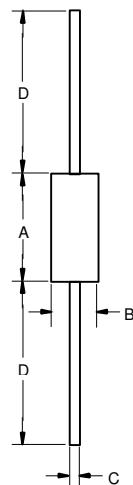
2. Electrical characteristics applicable in both forward and reverse directions.

3. Connected in parallel with the devices.

DB3/DC34 AND DB4

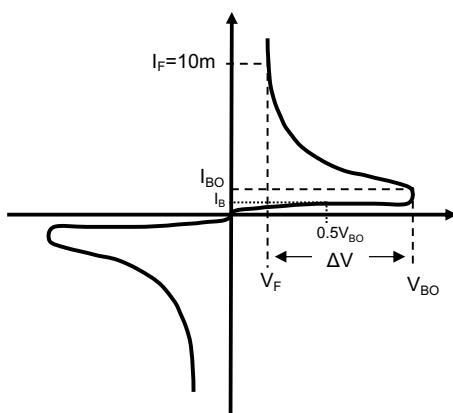
SILICON BIDIRECTIONAL DIAC

DO-35G



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	---	

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

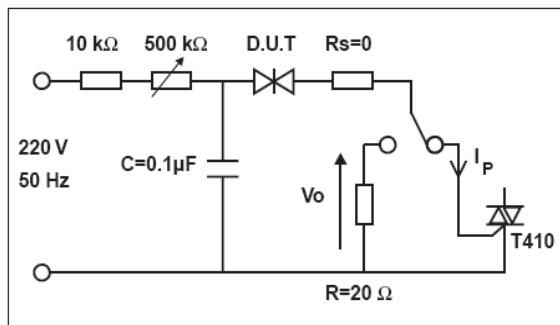


Figure 1. Admissible Power Dissipation Curve

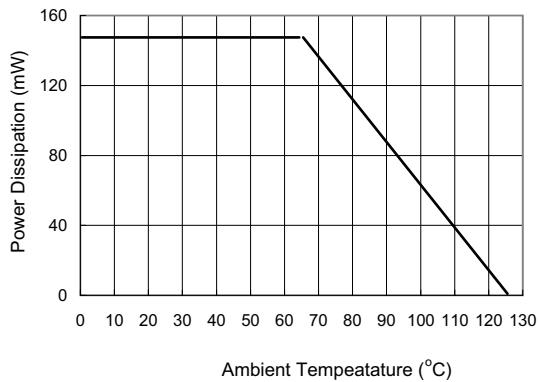


Figure 2. Relative Variation of VBO versus Junction Temperature

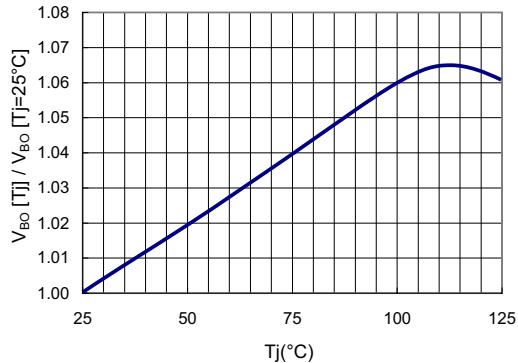
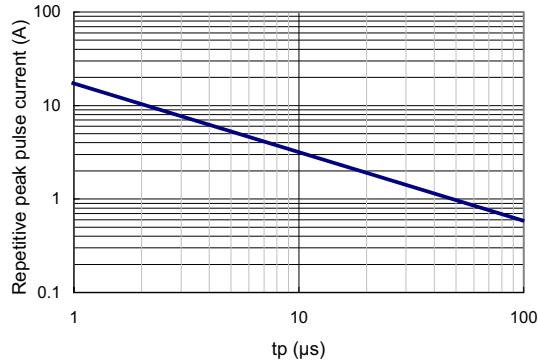


Figure 3. Repetitive Peak Pulse Current versus Pulse Duration (maximum values)



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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

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