

**Micro Commercial Components** 

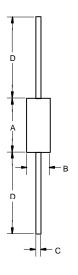
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

# DB3/DC34 AND DB4/DB6

## SILICON BIDIRECTIONAL DIAC

### DO-35G



DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α		.150		3.8			
В		.079		2.00			
С		.020		.52			
D	1.083		27.50				

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

### Maximum Ratings

- Operating Temperature: -40°C to +110°C
- Storage Temperature: -40°C to +125°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Power dissipation			
on Printed	P <sub>C</sub>	150mW	
Circuit(I=10mm)			T <sub>A</sub> =50°C
Repetitive Peak			
on-state Current	I <sub>TRM</sub>		
DB3,DC34,DB4	'IRM	2.0A	
DB6		16A	t <sub>p</sub> =10us,f=100Hz
Breakover Voltage		Min Typ Max	
DB3	.,	28 32 36V	0 00 5(1) ( 0)
DC34	$V_{BO}$	30 34 38V	C=22nF(Note 3)
DB4 DB6		35 40 45V	
		56 60 70V	
Breakover Voltage	1.1/		
Symmetry DB3, DC34, DB4	+V <sub>BO</sub>	±3V	C=22nF(Note 3)
DB6	- -V <sub>BO</sub>	±3 v ±4 V	
Output		<u> </u>	
Voltage(Note 2)	$V_{o(min)}$	5V	
Breakover		1004	C 225E
Current(Note 2)	I <sub>BO(max)</sub>	100uA	C=22nF
Rise Time(Note 2)	$T_r$	1.5us	
Leakage	l <sub>a</sub> ,	10uA	$V_B=0.5V_{BO(max)}$
Current(Note 2)	I <sub>B(max)</sub>	IOUA	VB-0.0 VBO(max)

- 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
  - 2. Electrical characteristics applicable in both forward and reverse directions.
- 3. Connected in parallel with the devices.



#### RATINGS AND CHARACTERISTIC CURVES DB3/DC34/DB4/DB6

DIAGRAM 1: Current-valtage characteristics

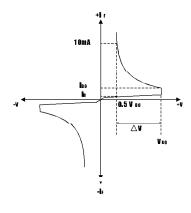


FIG.1-Power dissipation versus ambient temperature (maximum values)

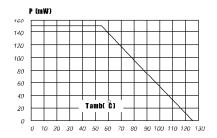


FIG.3-Peak pulse current versus pulse duration (maximum values)

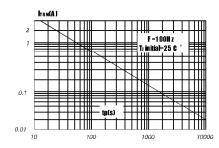
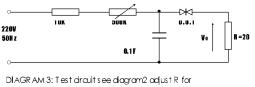


DIAGRAM 2: Test aircuit for output voltage



I=0ı5A

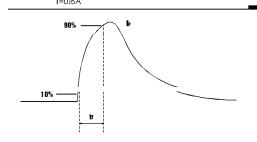
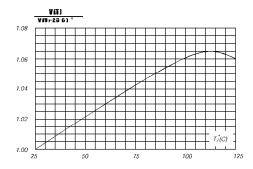


FIG.2-Relative variation of VBO versus junction temperature(typical values)





## Ordering Information

Device	Packing		
(Part Number)-TP	Tape&Reel 10Kpcs/Reel		
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox		
(Part Number)-BP	Bulk;500pcs/Bag		

#### \*\*\*IMPORTANT NOTICE\*\*\*

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.
Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.