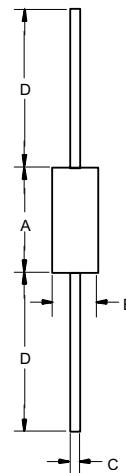


# DB3A

## SILICON BIDIRECTIONAL DIAC

### A-405



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	---	.024	---	.60	
D	1.000	---	25.40	---	

## 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 RoHS Compliant. See ordering information)
- High temperature soldering guaranteed
- 250 C/10 seconds, 0.375" (9.5mm) lead length,
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## 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 Circuit (l=10mm)	P <sub>C</sub>	150mW	T <sub>A</sub> =65°C
Repetitive Peak on-state Current DB3, DC34, DB4 DB6	I <sub>TRM</sub>	2.0A 16A	t <sub>p</sub> =10us, f=100Hz
Breakover Voltage	V <sub>BO</sub>	Min Typ Max 28 32 36V	C=22nF (Note 3)
Breakover Voltage Symmetry	+V <sub>BO</sub>    -V <sub>BO</sub>	±3V	C=22nF (Note 3)
Output Voltage (Note 2)	V <sub>o(min)</sub>	5V	
Breakover Current (Note 2)	I <sub>BO(max)</sub>	100uA	C=22nF
Rise Time (Note 2)	T <sub>r</sub>	1.5us	
Leakage Current (Note 2)	I <sub>B(max)</sub>	10uA	V <sub>B</sub> =0.5V <sub>BO(max)</sub>

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
 2. Electrical characteristics applicable in both forward and reverse directions.  
 3. Connected in parallel with the devices.

# DB3A

DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

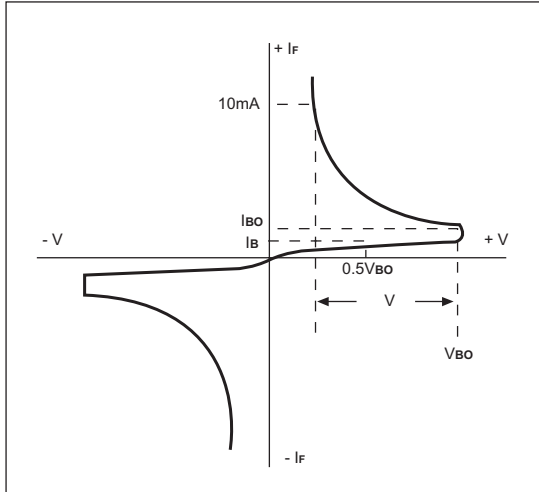


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

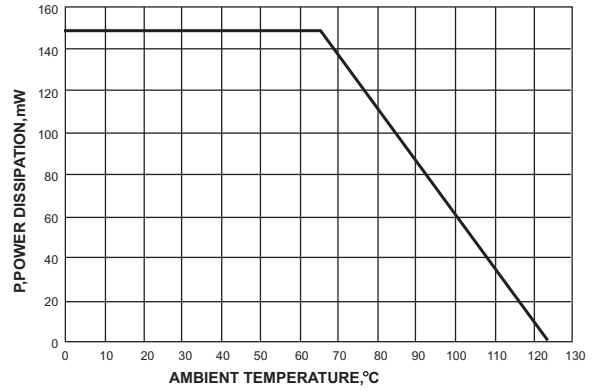


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

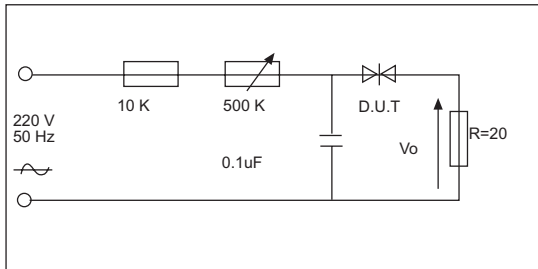


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

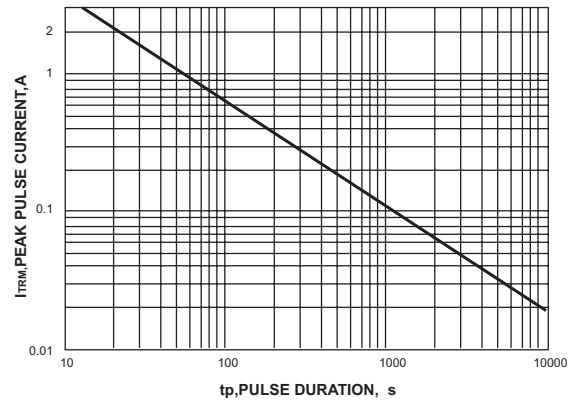


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR If=0.5A

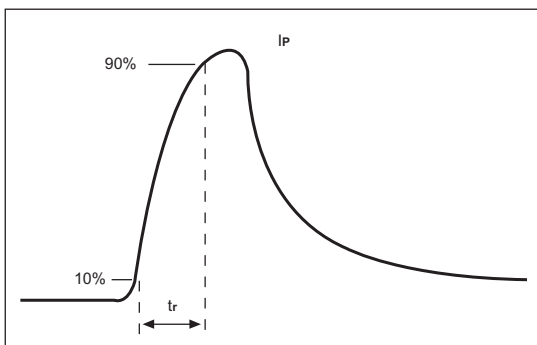
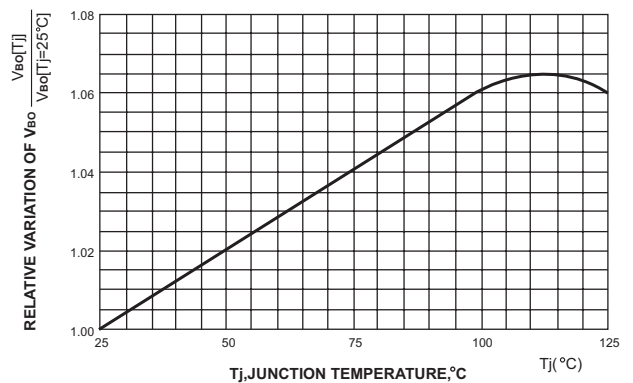


FIG. 3-RELATIVE VARIATION OF VBo VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)





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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

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