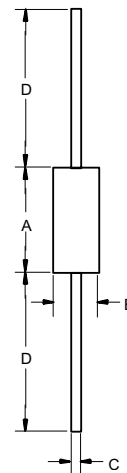


DB3A

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 _C	150mW	T _A =65°C
Repetitive Peak on-state Current DB3,DC34,DB4 DB6	I _{TRM}	2.0A 16A	t _p =10us, f=100Hz
Breakover Voltage	V _{BO}	Min Typ Max 28 32 36V	C=22nF (Note 3)
Breakover Voltage Symmetry	+V _{BO} -V _{BO}	±3V	C=22nF (Note 3)
Output Voltage (Note 2)	V _{o(min)}	5V	
Breakover Current (Note 2)	I _{BO(max)}	100µA	C=22nF
Rise Time (Note 2)	T _r	1.5µs	
Leakage Current (Note 2)	I _{B(max)}	10µA	V _B =0.5V _{BO(max)}

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

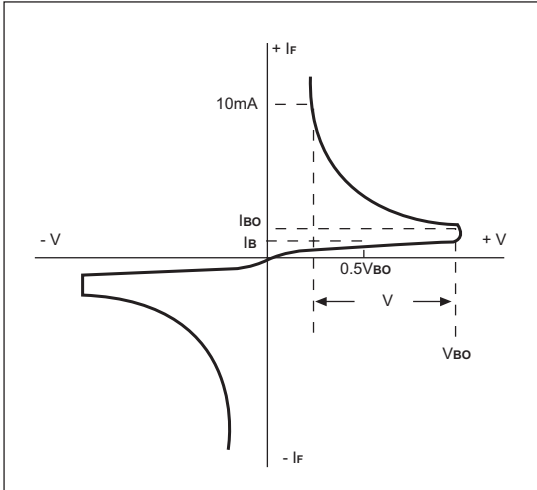


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

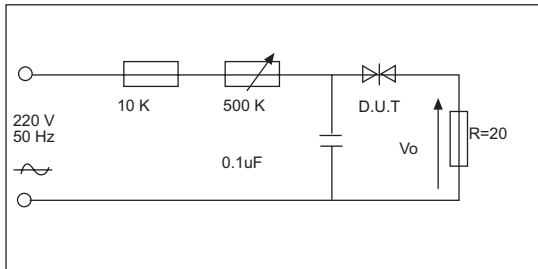


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR $I_f=0.5A$

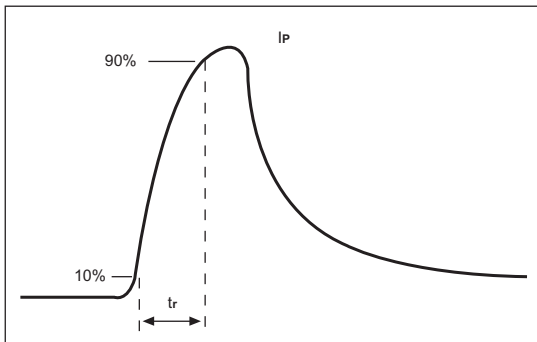


FIG. 1- POWER DISSIPATION VERSUS AMBIENT TEMPERATURE (MAXIMUM VALUES)

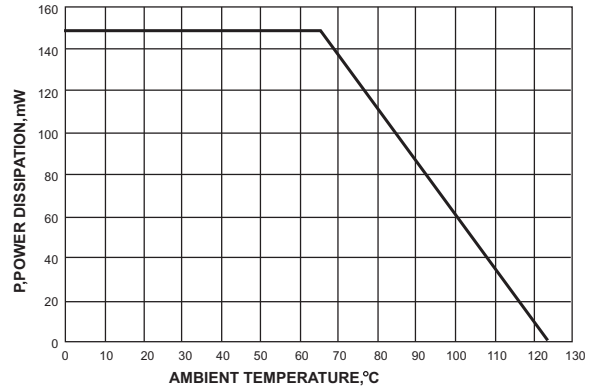


FIG. 2- PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

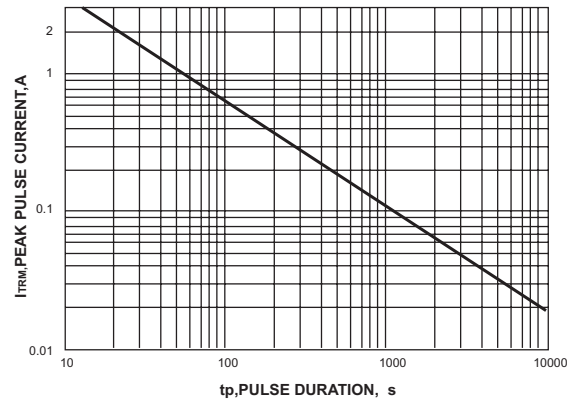
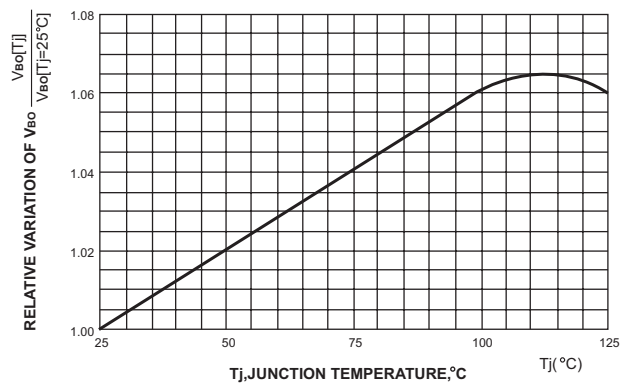


FIG. 3- RELATIVE VARIATION OF V_{Bo} VERSUS JUNCTION TEMPERATURE (TYPICAL VALUES)





TM

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Ordering Information :

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

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