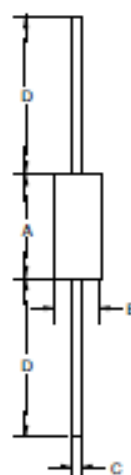


## DB3A

## SILICON BIDIRECTIONAL DIAC

### A-405



| DIMENSIONS |        |      |       |      |      |
|------------|--------|------|-------|------|------|
| DIM        | INCHES |      | MM    |      | NOTE |
|            | MIN    | MAX  | MIN   | MAX  |      |
| A          | .188   | .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                    | $T_A=65^\circ\text{C}$              |
| Repetitive Peak on-state Current DB3, DC34, DB4 DB6 | $I_{TRM}$                  | 2.0A<br>16A              | $t_p=10\mu\text{s}, f=100\text{Hz}$ |
| Breakover Voltage                                   | $V_{BO}$                   | Min Typ Max<br>28 32 36V | $C=22\text{nF (Note 3)}$            |
| Breakover Voltage Symmetry                          | $ +V_{BO} $<br>$ -V_{BO} $ | $\pm 3\text{V}$          | $C=22\text{nF (Note 3)}$            |
| Output Voltage (Note 2)                             | $V_{o(\min)}$              | 5V                       |                                     |
| Breakover Current (Note 2)                          | $I_{BO(\max)}$             | 100uA                    | $C=22\text{nF}$                     |
| Rise Time (Note 2)                                  | $T_r$                      | 1.5us                    |                                     |
| Leakage Current (Note 2)                            | $I_{B(\max)}$              | 10uA                     | $V_B=0.5V_{BO(\max)}$               |

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.

