



Micro Commercial Components

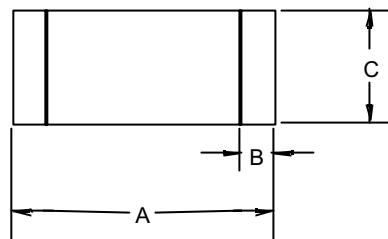


Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

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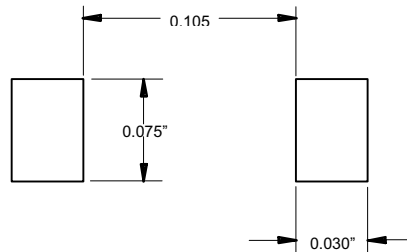
**SILICON
BIDIRECTIONAL
DIAC**

MINIMELF



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .134 | .142 | 3.40 | 3.60 | |
| B | .008 | .016 | .20 | .40 | |
| C | .055 | .059 | 1.40 | 1.50 | Ø |

SUGGESTED SOLDER PAD LAYOUT



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 thyristors phase control , circuits for lamp dimming, universal motor speed control ,and heat control.

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 =50°C |
| Repetitive Peak on-state Current | I _{TRM} | 2.0A | t _p =10us,f=100Hz |
| Breakover Voltage | V _{BO} | Min Typ Max 35 40 45V | 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)} | 100uA | C=22nF |
| Rise Time(Note 2) | T _r | 1.5us | |
| Leakage Current(Note 2) | I _{B(max)} | 10uA | V _B =0.5V _{BO(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.

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DIAGRAM 1: Current-voltage characteristics

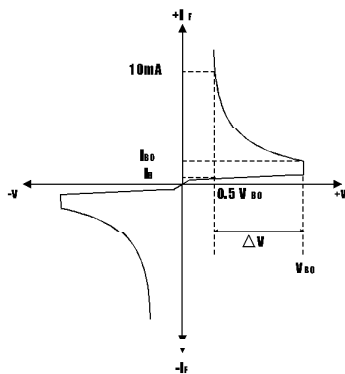


FIG.1-Power dissipation versus ambient temperature (maximum values)

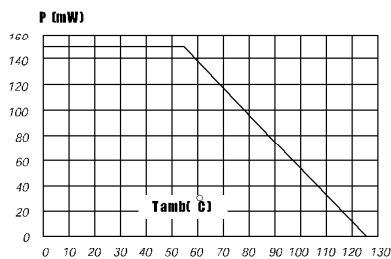


FIG.3-Peak pulse current versus pulse duration (maximum values)

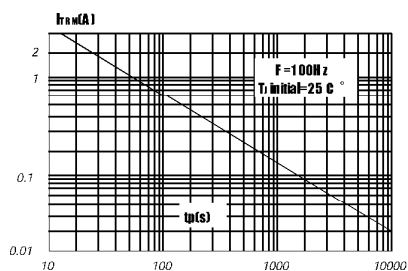


DIAGRAM 2: Test circuit for output voltage

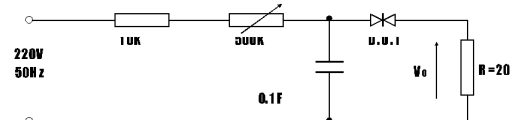


DIAGRAM 3: Test circuit see diagram2 adjust R for I=0.5A

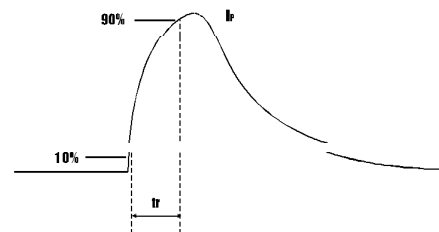
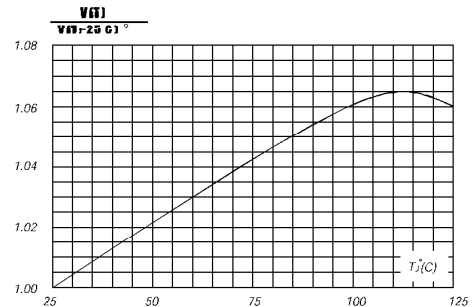


FIG.2-Relative variation of V_BO versus junction temperature (typical values)



Ordering Information :

| Device | Packing |
|----------------|-------------------------|
| Part Number-TP | Tape&Reel: 2.5Kpcs/Reel |

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