



Micro Commercial Components

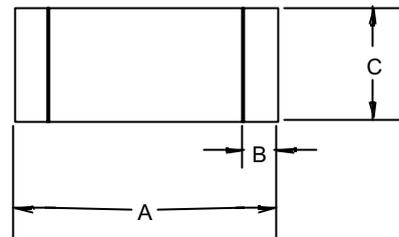


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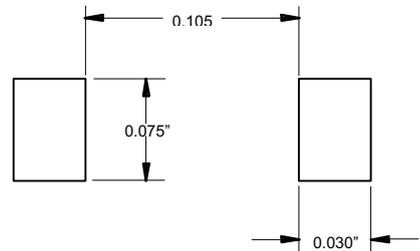
SILICON BIDIRECTIONAL DIAC

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 | ∅ |

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 | $T_A=50^\circ\text{C}$ |
| Repetitive Peak on-state Current | I_{TRM} | 2.0A | $t_p=10\mu\text{s}, f=100\text{Hz}$ |
| Breakover Voltage | V_{BO} | Min Typ Max 35 40 45V | $C=22\text{nF}(\text{Note } 3)$ |
| Breakover Voltage Symmetry | $ +V_{BO} $ $ -V_{BO} $ | $\pm 3V$ | $C=22\text{nF}(\text{Note } 3)$ |
| Output Voltage(Note 2) | $V_{o(\text{min})}$ | 5V | |
| Breakover Current(Note 2) | $I_{BO(\text{max})}$ | 100uA | $C=22\text{nF}$ |
| Rise Time(Note 2) | T_r | 1.5us | |
| Leakage Current(Note 2) | $I_{B(\text{max})}$ | 10uA | $V_B=0.5V_{BO(\text{max})}$ |

- 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

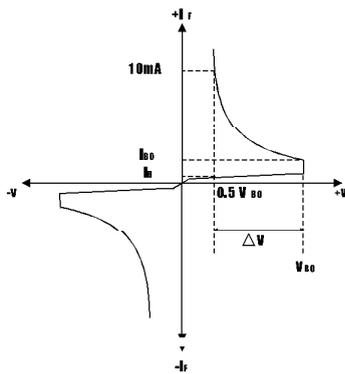


FIG.1-Power dissipation versus ambient temperature (maximum values)

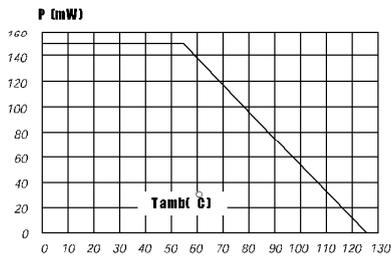


FIG.3-Peak pulse current versus pulse duration (maximum values)

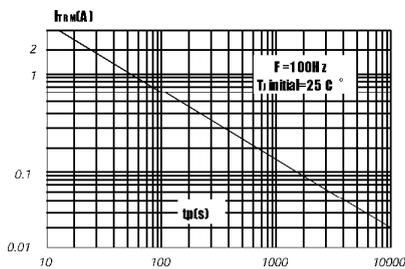


DIAGRAM 2: Test circuit for output voltage

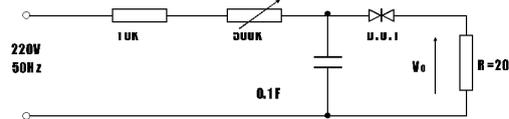


DIAGRAM 3: Test circuit see diagram2 adjust R for I=0.5A

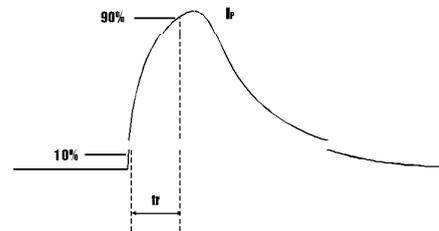
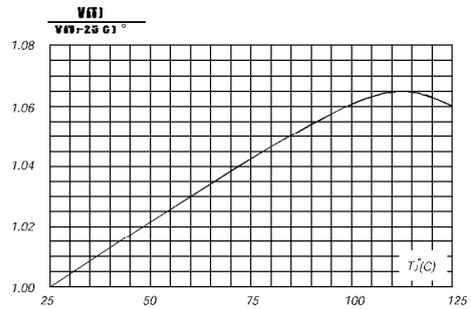


FIG.2-Relative variation of V_O versus junction temperature (typical values)





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Ordering Information :

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

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