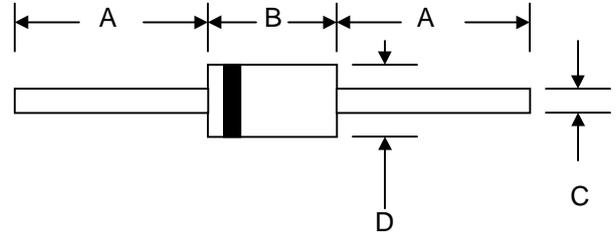


DB3

SILICON BIDIRECTIONAL DIACS

Features

- VBO:28-36V
- Low Breakover Current



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

| DO-41 | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 25.4 | — |
| B | 4.06 | 5.21 |
| C | 0.70 | 0.90 |
| D | 2.00 | 2.72 |
| All Dimensions in mm | | |

| DO-35 | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 27.5 | — |
| B | — | 3.8 |
| C | 0.50 | 0.60 |
| D | — | 2.0 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$

| ABSOLUTE RATINGS | | | | | |
|---|--------------------------------|---|-------|------------------|---------------|
| PARAMETERS | SYMBOL | VALUE | | UNITS | |
| | | DB3 | | | |
| Power Dissipation on Printed Cir cuit(L=10mm) $T_A=50^\circ\text{C}$ | P_c | 150 | | mW | |
| Repetitive Peak on-state Current $T_p=10\mu\text{s}$ $f=100\text{Hz}$ | I_{TRM} | 2.0 | | A | |
| Storage and Operating Junction Temperature | T_{STG}/T_J | -40 to +125 | | $^\circ\text{C}$ | |
| ELECTRICAL CHARACTERISTICS | | | | | |
| PARAMETERS | SYMBOLS | TEST CONDITIONS | VALUE | | UNITS |
| | | | DB3 | | |
| Breakover Voltage* | V_{BO} | C=22nF** See Diagram 1 | Min | 28 | V |
| | | | Typ | 32 | |
| | | | Max | 36 | |
| Breakover Voltage Symmetry | 1+ V_{BO1} - 1- V_{BO1} | C=22nF** See Diagram 1 | Max | ± 3 | V |
| Dynamic Breakover Voltage | 1 $\pm\Delta V_1$ | $\Delta I=(I_{BO}$ to $I_F=10\text{mA})$ See FIG 1 | Min | 5 | V |
| Output Voltage* | V_o | See FIG 2 | Min | 5 | V |
| Breakover Current* | I_{BO} | C=22nF** | Max | 100 | μA |
| Rise Time* | t_r | See FIG 3 | Typ | 1.5 | μs |
| Leakage Current* | I_B | $I_B=0.5 V_{BO}$ MAX See FIG 3 | Max | 10 | μA |

NOTE:* Electrical characteristics applicable in both forward and reverse directions.

** Connected in parallel with the devices.

FIG.1-CURRENT-VOLTAGE CHARACTERISTICS

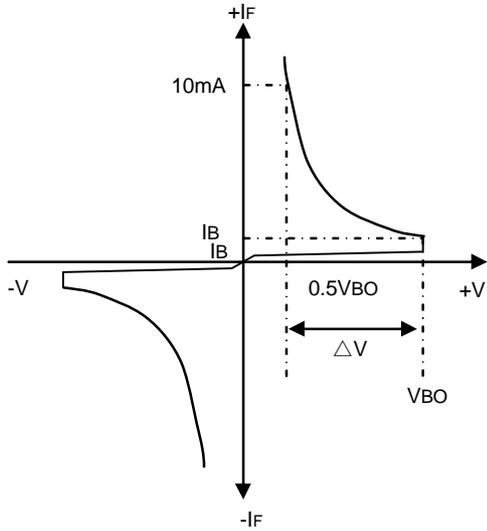


FIG.2-TEST CIRCUIT FOR OUTPUT VOLTAGE

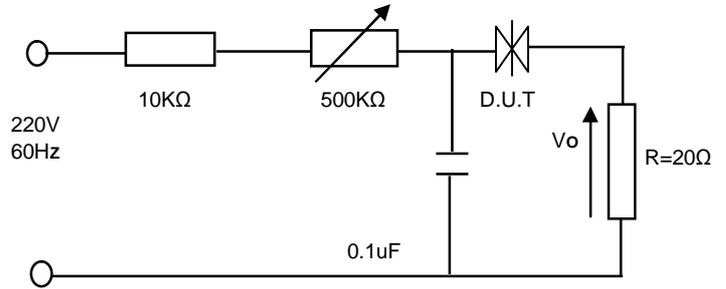


FIG.3-TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_p=0.5A$

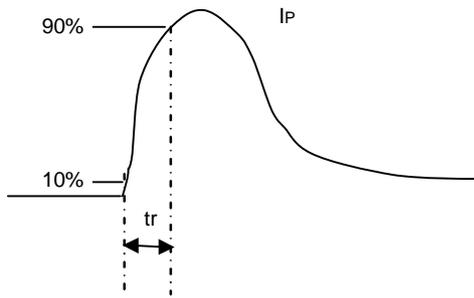


FIG.4-TEST CIRCUIT FOR OUTPUT

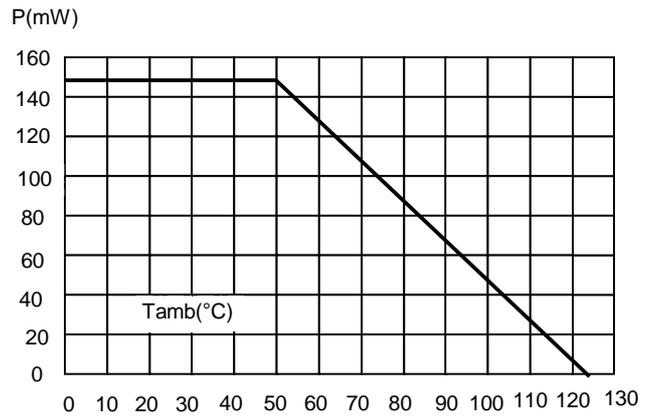


FIG.5-RELATIVE VARIATION OF VBO VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

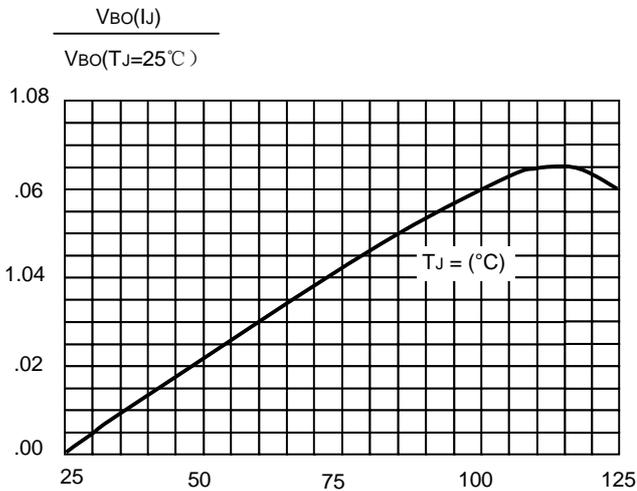


FIG.6-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

