

PFS

BIDIRECTIONAL TRIGGER DIODE

DSDB3

**REVERSE VOLTAGE
POWER**

**32 VOLTS
150 mW**

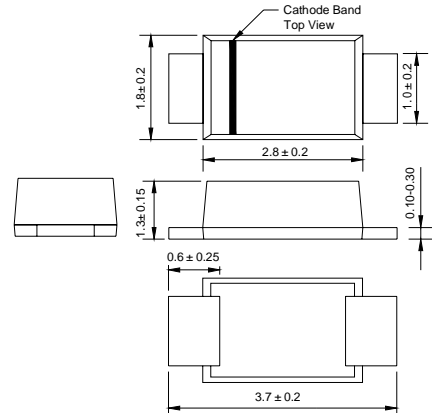
FEATURES

- Small glass structure ensures high reliability
- VBO:28-36V version
- Low breakover current
- High temperature soldering guaranteed
260°C/10 seconds,0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case: JEDEC SOD-123FL molded plastic body
- Terminals : Solderable per MIL-STD-750, Method 2026
- Mounting Position : Any
- Weight :0.0007 ounce, 0.02gram
- Marking :DB3

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified.

| | TEST CONDITION | SYMBOLS | VALUE | | | UNITS |
|--|----------------------------|-------------------------|-------|------|------|--------------|
| | | | Min. | Typ. | Max. | |
| Breakover voltage * | C=22nF ** | V_{BO} | 28 | 32 | 36 | VOLTS |
| Breakover voltage symmetry | C=22nF ** | $ +V_{BO} - -V_{BO} $ | -3 | | 3 | VOLTS |
| Dynamic breakover voltage * | (NOTE 1) | $ \Delta V \pm I $ | 5 | | | VOLTS |
| Output voltage * | DIAGRAM2 | V_o | 5 | | | VOLTS |
| Breakover current * | C=22nF ** | I_{BO} | | | 100 | μA |
| Rise time * | DIAGRAM3 | t_r | | 1.5 | | μS |
| Leakage current * | $V_R=0.5V_{BO}$ | I_B | | | 10 | μA |
| Power dissipation on printed circuit | $T_A=65^\circ C$ | P_d | | | 150 | mW |
| Repetitive peak on-state current | $t_p=20\mu s$ $f=100Hz$ | I_{TRM} | | | 2 | A |
| Thermal Resistances from Junction to ambient | | $R_{\theta JA}$ | | | 400 | $^\circ C/W$ |
| Thermal Resistances from Junction to lead | | $R_{\theta JL}$ | | | 150 | $^\circ C/W$ |
| Operating junction and storage temperature range | | T_J, T_{STG} | -40 | | 125 | $^\circ C$ |

- Electrical characteristic appoicaboe in forward and reverse directions.
- Connected in parallel with the devices.

Note 1: I_{BO} from I_{BO} to 10mA

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DIAGRAM 1: CURRENT-VOLTAGE CHARACTERISTICS

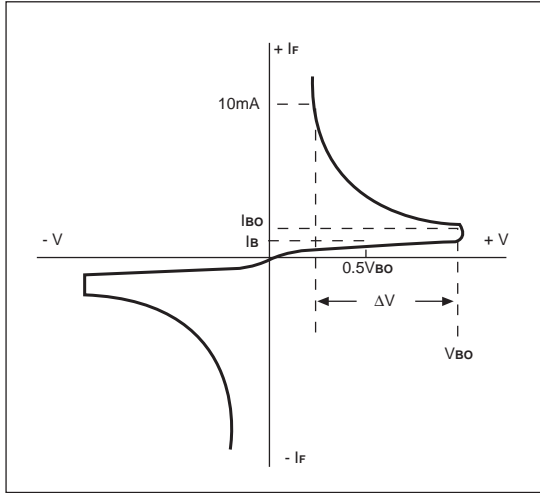


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

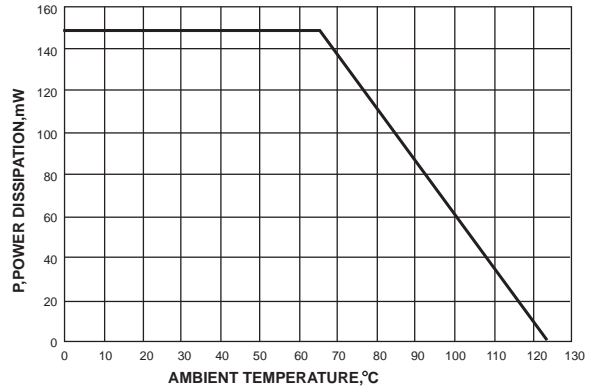


DIAGRAM 2: TEST CIRCUIT OUTPUT VOLTAGE

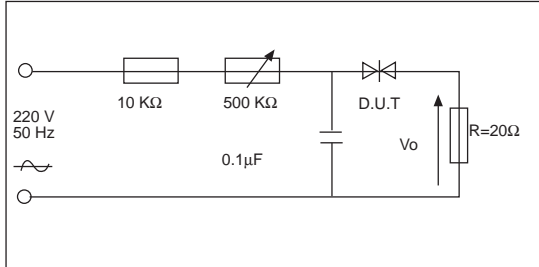


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

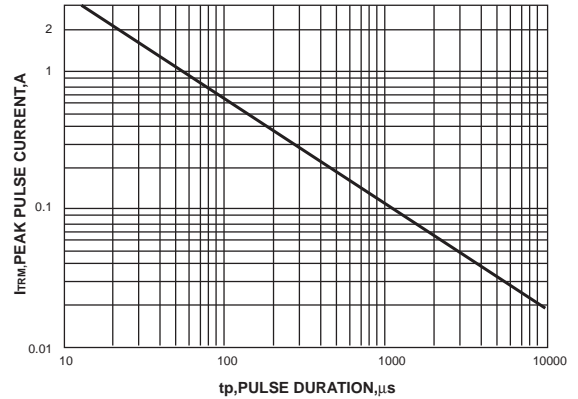


DIAGRAM 3: TEST CIRCUIT SEE DIAGRAM 2. ADJUST R FOR $I_p=0.5A$

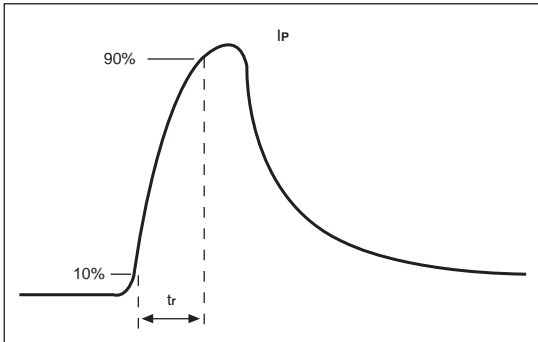


FIG. 3-RELATIVE VARIATION OF V_{Bo} VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

