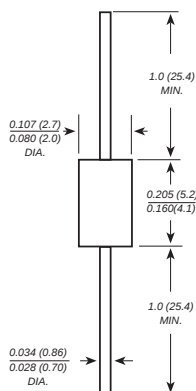


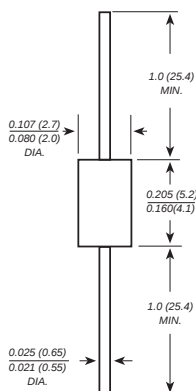
### BIDIRECTIONAL TRIGGER DIODE

Reverse Voltage - 32 Volts Power: 150mW

DO-41



A-405



Dimensions in inches and (millimeters)

### FEATURES

- The plastic package
- VBO:28-36V version
- Low breakover current
- High temperature soldering guaranteed  
250°C/10 seconds, 0.375"(9.5mm) lead length,  
5 lbs. (2.3kg) tension

### MECHANICAL DATA

**Case:** JEDEC DO-41/A-405 plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750,  
Method 2026

**Mounting Position:** Any

**Weight:** DO-41 0.012 ounce, 0.33gram

A-405 0.008 ounce, 0.23gram

### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

|                                                  | TEST<br>CONDITION                  | SYMBOLS                            | VALUE |      |      | UNITS |
|--------------------------------------------------|------------------------------------|------------------------------------|-------|------|------|-------|
|                                                  |                                    |                                    | Min.  | Typ. | Max. |       |
| Breakover voltage *                              | C=22nF **                          | V <sub>BO</sub>                    | 28    | 32   | 36   | VOLTS |
| Breakover voltage symmetry                       | C=22nF **                          | V <sub>BO1</sub> -V <sub>BO2</sub> | -3    |      | 3    | VOLTS |
| Dynamic breakover voltage *                      | (NOTE 1)                           | ΔV                                 | 5     |      |      | VOLTS |
| Output voltage *                                 | DIAGRAM2                           | V <sub>O</sub>                     | 5     |      |      | VOLTS |
| Breakover current *                              | C=22nF **                          | I <sub>BO</sub>                    |       |      | 100  | μA    |
| Rise time *                                      | DIAGRAM3                           | t <sub>r</sub>                     |       | 1.5  |      | μS    |
| Leakage current *                                | V <sub>R</sub> =0.5V <sub>BO</sub> | I <sub>B</sub>                     |       |      | 10   | μA    |
| Power dissipation on printed circuit             | T <sub>A</sub> =65°C               | P <sub>d</sub>                     |       |      | 150  | mW    |
| Repetitive peak on-state current                 | t <sub>p</sub> =20μs<br>f=100Hz    | I <sub>TRM</sub>                   |       |      | 2    | A     |
| Thermal Resistances from Junction to ambient     |                                    | R <sub>θJA</sub>                   |       |      | 400  | °C/W  |
| Thermal Resistances from Junction to lead        |                                    | R <sub>θJL</sub>                   |       |      | 150  | °C/W  |
| Operating junction and storage temperature range |                                    | T <sub>J</sub> , T <sub>STG</sub>  | -40   |      | 125  | °C    |

\* :Electrical characteristic appoicaboe in forward and reverse directions.

\*\* :Connected in parallel with the devices.

Note 1:I<sub>BO</sub> from I<sub>BO</sub> to 10mA

# RATINGS AND CHARACTERISTIC CURVES DB3

DIAGRAM 1:CURRENT-VOLTAGE CHARACTERISTICS

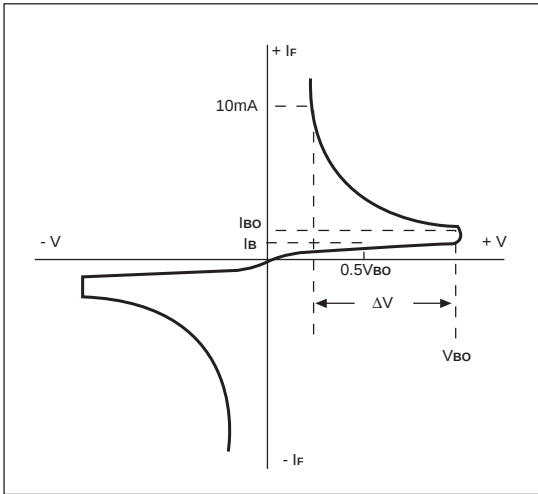


FIG. 1-POWER DISSIPATION VERSUS AMBIENT TEMPERATURE(MAXIMUM VALUES)

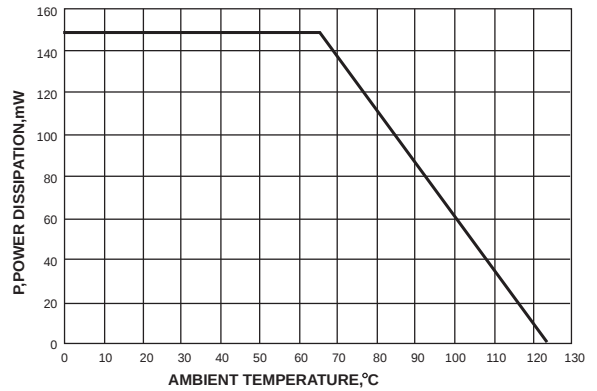


FIG. 2-PEAK PULSE CURRENT VERSUS PULSE DURATION (MAXIMUM VALUES)

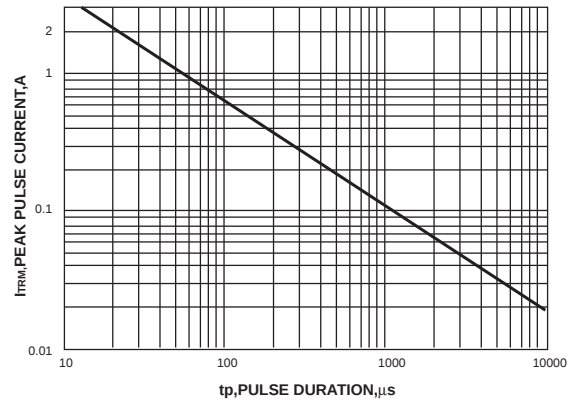


DIAGRAM 2:TEST CIRCUIT OUTPUT VOLTAGE

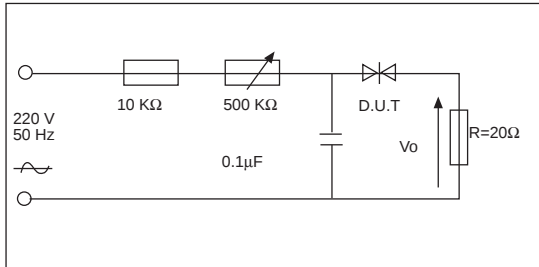


DIAGRAM 3:TEST CIRCUIT SEE DIAGRAM 2.ADJUST R FOR \$I\_P=0.5A\$

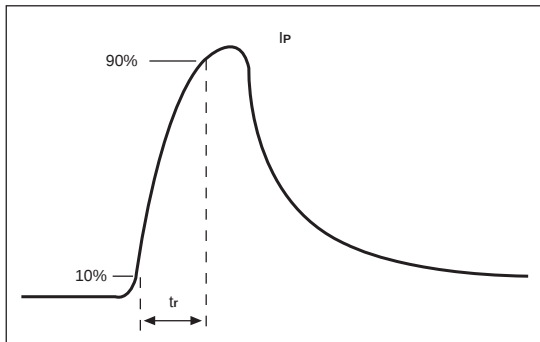


FIG. 3-RELATIVE VARIATION OF \$V\_{Bo}\$ VERSUS JUNCTION TEMPERATURE(TYPICAL VALUES)

