## TRIGGER DIODES

## FEATURES

- $\mathrm{V}_{\mathrm{BO}}: 32 \mathrm{~V} / 34 \mathrm{~V} / 40 \mathrm{~V}$ VERSIONS
- LOW BREAKOVER CURRENT


## DESCRIPTION

High reliability glass passivation insuring parameter stability and protection against junction contamination.


ABSOLUTE RATINGS (limiting values)

| Symbol | Parameter | Value | Unit |  |
| :---: | :--- | :---: | :---: | :---: |
| P | Power dissipation on printed circuit <br> $(\mathrm{L}=10 \mathrm{~mm})$ | $\mathrm{Ta}=65^{\circ} \mathrm{C}$ | 150 | mW |
| ITRM | Repetitive peak on-state current | $\mathrm{tp}=20 \mu \mathrm{~s}$ <br> $\mathrm{~F}=100 \mathrm{~Hz}$ | 2 | A |
| Tstg <br> Tj | Storage and operating junction temperature range | -40 to +125 <br> -40 to +125 | $\circ$ <br> ${ }^{\circ} \mathrm{C}$ |  |

THERMAL RESISTANCES

| Symbol | Parameter | Value | Unit |
| :--- | :--- | :---: | :---: |
| $R_{\text {th ( }(-\mathrm{a})}$ | Junction to ambient | 400 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| $R_{\text {th (j-l) }}$ | Junction-leads | 150 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |

ELECTRICAL CHARACTERISTICS ( $\mathrm{Tj}=25^{\circ} \mathrm{C}$ )

| Symbol | Parameter | Test Conditions |  | Value |  |  | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | DB3 | DC34 | DB4 |  |
| $\mathrm{V}_{\text {BO }}$ | Breakover voltage* | $\begin{aligned} & \mathrm{C}=22 \mathrm{nF}^{* *} \\ & \text { see diagram } 1 \end{aligned}$ | MIN | 28 | 30 | 35 | V |
|  |  |  | TYP | 32 | 34 | 40 |  |
|  |  |  | MAX | 36 | 38 | 45 |  |
| $\left[1+\mathrm{V} \mathrm{BO}-\mathrm{I}-\mathrm{V}_{\mathrm{BO}} \mathrm{l}\right]$ | Breakover voltage symmetry | $\begin{gathered} \mathrm{C}=22 \mathrm{nF}^{* *} \\ \text { see diagram } 1 \end{gathered}$ | MAX | $\pm 3$ |  |  | V |
| $1 \Delta \mathrm{~V} \pm \mathrm{l}$ | Dynamic breakover voltage * | $\begin{gathered} \Delta I=\left[l_{\text {Bo to }} I_{F}=10 \mathrm{~mA}\right] \\ \text { see diagram } 1 \end{gathered}$ | MIN | 5 |  |  | V |
| Vo | Output voltage * | see diagram 2 | MIN | 5 |  |  | V |
| $\mathrm{I}_{\mathrm{BO}}$ | Breakover current* | $\mathrm{C}=22 \mathrm{nF}$ ** | MAX | 100 | 50 | 100 | $\mu \mathrm{A}$ |
| tr | Rise time * | see diagram 3 | TYP | 1.5 |  |  | us |
| $\mathrm{I}_{\mathrm{B}}$ | Leakage current * | $\mathrm{V}_{\mathrm{B}}=0.5 \mathrm{~V}_{\mathrm{BO}} \max$ see diagram 1 | MAX | 10 |  |  | $\mu \mathrm{A}$ |

* Electrical characteristic applicable in both forward and reverse directions.
** Connected in parallel with the devices.

DIAGRAM 1 : Current-voltage characteristics


DIAGRAM 2 : Test circuit for output voltage


DIAGRAM 3 : Test circuit see diagram 2.
Adjust R for $\mathrm{Ip}=0.5 \mathrm{~A}$


Fig.1: Power dissipation versus ambient temperature (maximum values)


Fig. 2 : Relative variation of $\mathrm{V}_{\mathrm{BO}}$ versus junction temperature (typical values)


Fig. 3 : Peak pulse current versus pulse duration (maximum values)


PACKAGE MECHANICAL DATA (in millimeters)
DO 35 Glass

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REF. | DIMENSIONS |  |  |  | NOTES |  |  |
|  | Millimeters |  | Inches |  |  |  |  |
|  | Min. | Max. | Min. | Max. |  |  |  |
| A | 3.050 | 4.500 | 0.120 | 0.117 | 1 - The lead diameter $\varnothing \mathrm{D}$ is not controlled over zone E <br> 2 - The minimum axial lengh within which the device ma placed with its leads bent at right angles is 0.59 " $(15 \mathrm{~mm})$ |  |  |
| B | 12.7 |  | 0.500 |  |  |  |  |
| $\varnothing \mathrm{C}$ | 1.530 | 2.000 | 0.060 | 0.079 |  |  |  |
| $\varnothing \mathrm{D}$ | 0.458 | 0.558 | 0.018 | 0.022 |  |  |  |
| E |  | 1.27 |  | 0.050 |  |  |  |

Cooling method by convection and conduction
Marking : type number
Weight: 0.15 g

Polarity: N A
Stud torque: N A

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