## TB1M~TB10M

## Surface Mount Flat Bridge Rectifier

Reverse Voltage - 100 to 1000 V
Forward Current - 1 A

## Features

- Ideal for printed circuit board
- Glass passivated chip
- Reliable low cost construction utilizing molded plastic technique

- Terminal: Plated leads solderable per MIL-STD 202E, method 208C
- Case: UL-94 Class V-0 recognized flame retardant epoxy
- Polarity: Polarity symbol marked on body

Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical characteristics

Single-phase, half-wave, 60 Hz , resistive or inductive load rating at $25^{\circ} \mathrm{C}$, unless otherwise stated, for capacitive load, derate current by 20 \%.

| Parameter | Symbols | TB1M | TB2M | TB4M | TB6M | TB8M | TB10M | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Repetitive Peak Reverse Voltage | $\mathrm{V}_{\text {RRM }}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $V_{\text {RMS }}$ | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{D C}$ | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current on Glass-expoxy P.C.B. | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}$ | 1 |  |  |  |  |  | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $\mathrm{I}_{\text {FSM }}$ | 30 |  |  |  |  |  | A |
| Maximum Instantaneous Forward Voltage at Forward Current 0.4 A | $V_{F}$ | 0.95 |  |  |  |  |  | V |
| Maximum DC Reverse Current $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ <br> at Rated DC Blocking Voltage $\mathrm{T}_{\mathrm{a}}=125^{\circ} \mathrm{C}$ | $\mathrm{I}_{\mathrm{R}}$ | $\begin{gathered} \hline 5 \\ 100 \end{gathered}$ |  |  |  |  |  | $\mu \mathrm{A}$ |
| Typical Thermal ResistanceJunction to Lead <br> On Glass-expoxy P.C.B. | $\begin{aligned} & \hline \mathrm{R}_{\text {өJL }} \\ & \mathrm{R}_{\text {隹 }} \end{aligned}$ | $\begin{aligned} & 42 \\ & 88 \\ & \hline \end{aligned}$ |  |  |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating and Storage Temperature Range | $\mathrm{T}_{\mathrm{j},} \mathrm{T}_{\text {stg }}$ | -55 to +150 |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |



FIG.3-MAXIMUM FORWARD CURRENT DERATING


FIG.2-TYPICAL FORWARD CHARACTERISTICS


FIG.4-FORWARD POWER DISSIPATION



