## GUF10D-E THRU GUF10M-E

## SINTERED GLASS JUNCTION FAST SWITCHING PLASTIC RECTIFIER VOLTAGE: 200 V to 1000 V <br> CURRENT: 1.0A

## FEATURE

High temperature metallurgically bonded construction Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
$350^{\circ} \mathrm{C} / 10 \mathrm{sec} / 0.375^{\prime \prime}$ lead length at 5 lbs tension
Operate at $\mathrm{Ta}=55^{\circ} \mathrm{C}$ with no thermal run away
Typical $\operatorname{Ir}<0.2 \mu \mathrm{~A}$
Low power loss, high efficient
Halogen Free

## MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: color band denotes cathode
Mounting position: any


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
(single-phase, half wave, 60 HZ , resistive or inductive load rating at $25^{\circ} \mathrm{C}$, unless otherwise stated)

|  | SYMBOL | GUF10D-E | GUF10G-E | GUF10K-E | GUF10M-E | units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 200 | 400 | 800 | 1000 | V |
| Maximum RMS Voltage | Vrms | 140 | 280 | 560 | 700 | V |
| Maximum DC blocking Voltage | Vdc | 200 | 400 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current $3 / 8^{\prime \prime}$ lead length at $\mathrm{Ta}=55^{\circ} \mathrm{C}$ | If(av) | 1.0 |  |  |  | A |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load | Ifsm | 30 |  |  |  | A |
| Maximum Forward Voltage at rated Forward Current and $25^{\circ} \mathrm{C}$ | Vf | 1.1 | 1.4 | 1.7 |  | V |
| Maximum full load reverse current full cycle average at $55^{\circ} \mathrm{C}$ Ambient | Ir(av) | 50 |  |  |  | $\mu \mathrm{A}$ |
| Maximum DC Reverse Current $\mathrm{Ta}=25^{\circ} \mathrm{C}$ <br> at rated DC blocking voltage $\mathrm{Ta}=125^{\circ} \mathrm{C}$ | Ir | $\begin{gathered} 5.0 \\ 50 \end{gathered}$ |  |  |  | $\mu \mathrm{A}$ |
| Maximum Reverse Recovery Time (Note 1) | Trr | 50 |  | 75 |  | nS |
| Typical Junction Capacitance (Note 2) | Cj | 17 |  | 15 |  | pF |
| Typical Thermal Resistance (Note 3) | Rth(ja) | 50 |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Storage and Operating Temperature Range | Tstg, Tj | -65 to +175 |  |  |  | ${ }^{\circ} \mathrm{C}$ |
| Note: <br> 1. Reverse Recovery Condition If $=0.5 \mathrm{~A}, \mathrm{Ir}=1.0 \mathrm{~A}, \mathrm{Irr}=0.25 \mathrm{~A}$ <br> 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc <br> 3. Thermal Resistance from Junction to Ambient at $3 / 8^{\prime \prime}$ lead length, P.C. Board Mounted |  |  |  |  |  |  |

## RATINGS AND CHARACTERISTIC CURVES GUF10D-E THRU GUF10M-E


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