## 1A1G THRU 1A7G

## Glass Passivated Rectifiers

Reverse Voltage - 50 to 1000 V
Forward Current - 1 A

## Features

- High reliability
- High current capability
- High surge current capability
- Low forward voltage drop


## Mechanical Data

- Case: Molded plastic black body
- Lead: Axial leads, solderable per MIL-STD 202E method 208 guaranteed.
- Mounting Position: Any


Dimensions in inches and (millimeters)

## Absolute Maximum Ratings and Characteristics

Ratings at $25^{\circ} \mathrm{C}$ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz , resistive or inductive load. For capacitive load, derate current by $20 \%$.

| Parameter | Symbols | 1A1G | 1A2G | 1A3G | 1A4G | 1A5G | 1A6G | 1A7G | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Marking | 1A1G | 1A2G | 1A3G | 1A4G | 1A5G | 1A6G | 1A7G | - |
| Maximum repetitive peak reverse voltage | $\mathrm{V}_{\text {RRM }}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | $\mathrm{V}_{\text {RMS }}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | $V_{D C}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ | $\mathrm{I}_{\text {(AV) }}$ | 1 |  |  |  |  |  |  | A |
| Peak forward surge current 8.3 ms single half sinewave superimposed on rated load (JEDEC Method) | $\mathrm{I}_{\text {FSM }}$ | 25 |  |  |  |  |  |  | A |
| Maximum instantaneous forward voltage at 1A DC | $V_{F}$ | 1.1 |  |  |  |  |  |  | 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 junction capacitance ${ }^{1)}$ | C | 15 |  |  |  |  |  |  | pF |
| Typical thermal resistance ${ }^{2)}$ | $\mathrm{R}_{\text {өJA }}$ | 50 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating and storage temperature range | $\mathrm{T}_{\mathrm{J}}, \mathrm{T}_{\text {Stg }}$ | -50 to +150 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |

${ }^{1)}$ Measured at 1 MHz and applied reverse voltage of 4 V D.C.
${ }^{2)}$ Thermal resistance from junction to ambient at 0.375 " ( 9.5 mm ) lead length,P.C.B. mounted

$\square$ BS-OHSAS $18001: 2000$



INSTANTANEOUS FORWARD VOLEAGE， VOLTS

FIG．5－TYPICAL JUNCTION CAPACITANCE


FIG．2－MAXIMUM NON－REPETITIVE PEAK FORWARD


FIG．4－TYPICAL REVERSE CHARACTERISTICS


FIG．6－TYPICAL TRANSIENT THERMAL IMPEDANCE


