



# 1A1G THRU 1A7G

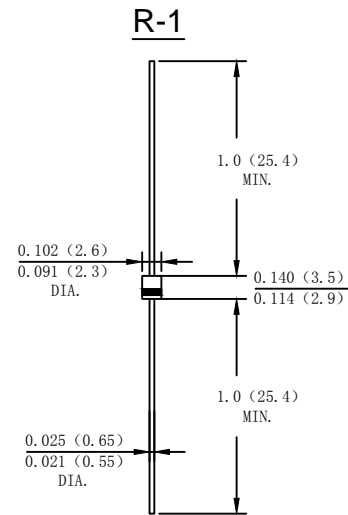
1.0 AMP. Glass Passivated Rectifiers

## Features

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

## Mechanical Data

- Case: Molded plastic black body,R-1
- Terminals: Plated leads solderable per MIL-STD-202,Method 208
- Polarity: Cathode band
- Mounting Position: Any
- Making: Type Number
- Lead Free: For RoHS/LeadFree Version



Dimensions in inches and(millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

| Type Number  | SYMBOL          | 1A1G        | 1A2G | 1A3G | 1A4G | 1A5G | 1A6G | 1A7G | Unit         |
|--|-----------------|-------------|------|------|------|------|------|------|--------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RM}$        | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V            |
| Maximum RMS Voltage  | $V_{RMS}$       | 35          | 70   | 140  | 280  | 420  | 560  | 700  | V            |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V            |
| Average Rectified Output Current (Note 1)<br>@ $T_A = 40^\circ C$                                | $I_o$           | 1.0         |      |      |      |      |      |      | A            |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 25          |      |      |      |      |      |      | A            |
| Forward Voltage @ $I_F = 1.0A$   | $V_{FM}$        | 1.1         |      |      |      |      |      |      | V            |
| Peak Reverse Current @ $T_A = 25^\circ C$  | $I_R$           | 5.0         |      |      |      |      |      |      | uA           |
| At Rated DC Blocking Voltage @ $T_A = 100^\circ C$   |                 | 100         |      |      |      |      |      |      |              |
| Typical Junction Capacitance (Note 2)  | $C_j$           | 15          |      |      |      |      |      |      | pF           |
| Typical Thermal Resistance Junction to Ambient   | $R_{\theta JA}$ | 50          |      |      |      |      |      |      | $^\circ C/W$ |
| Operating Temperature Range  | $T_j$           | -65 to +150 |      |      |      |      |      |      | $^\circ C$   |
| Storage Temperature Range  | $T_{STG}$       | -65 to +150 |      |      |      |      |      |      | $^\circ C$   |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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Fig. 1-FORWARD CURRENT DERATING CURVE

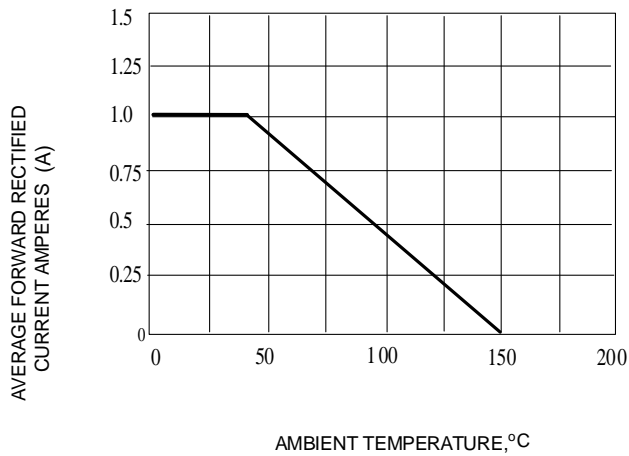


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

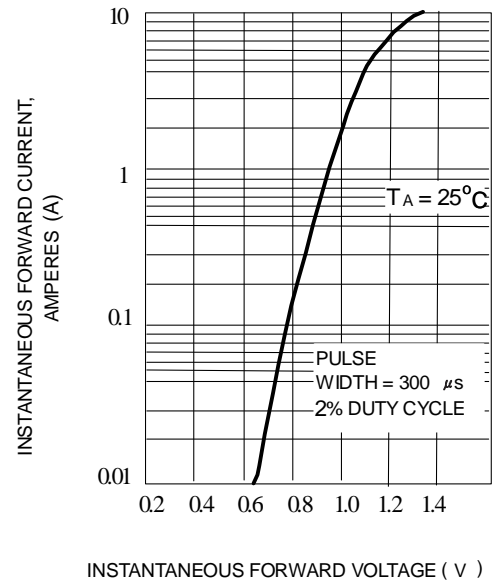


Fig. 3-MAXIMUM OVERLOAD SURGE CURRENT

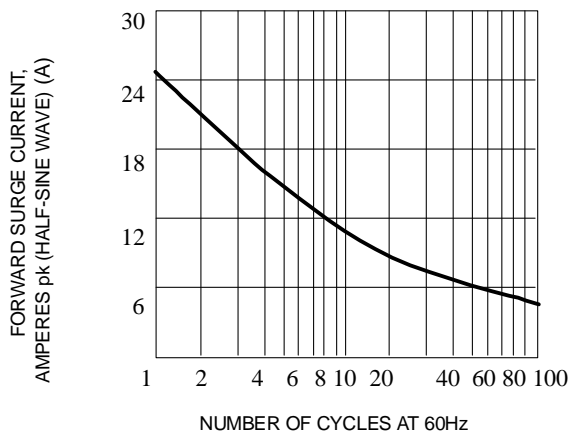


Fig. 4-TYPICAL JUNCTION CAPACITANCE

