

## **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

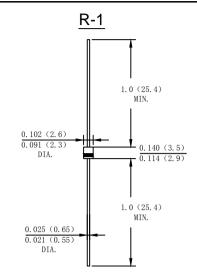
MIL-STD-202, Method 208

· 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 <sub>RM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average Rectified Output Current (Note 1) @T∟ =75°C	<b>I</b> F(AV)	1.0							Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	25							А
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	2.594							A <sup>2</sup> s
Forward Voltage @IF=1.0A	V <sub>FM</sub>	1.0							V
Peak Reverse Current @T <sub>A</sub> =25°C		5.0 100							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	l <sub>R</sub>								
Typical Junction Capacitance (Note 2)	Cj	15							pF
Typical Thermal Resistance Junction to Ambient	RөJA	50							°C/W
Operating Temperature Range	Tj	-65 to +150							$^{\circ}$
Storage Temperature Range	Тѕтс	-65 to +150							$^{\circ}$

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



AVERAGE FORWARD RECTIFIED CURRENT AMPERES (A)

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Fig. 1-FORWARD CURRENT DERATING CURVE

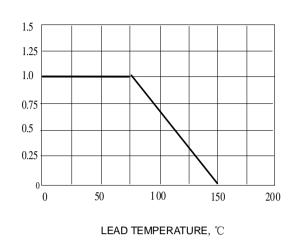
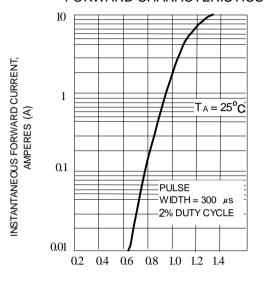


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE ( V )

Fig. 3-MAXIMUM OVERLOAD SURGE CURRENT

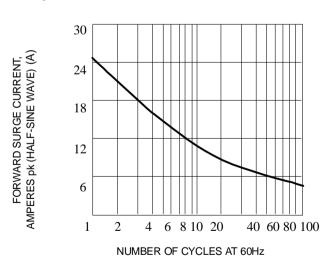
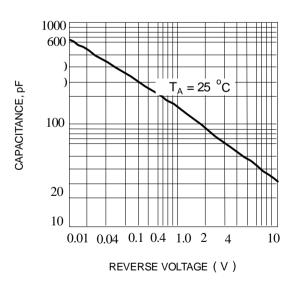


Fig. 4-TYPICAL JUNCTION CAPACITANCE



version:02 2of3 www.dyelec.com



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