

1A1G THRU 1A7G

MINIATURE GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 1.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction version of 1A1G thru 1A7G in R-1 package
- 1 ampere operation at $T_A=75\text{ }^{\circ}\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228

MECHANICAL DATA

Case: Molded plastic, R-1

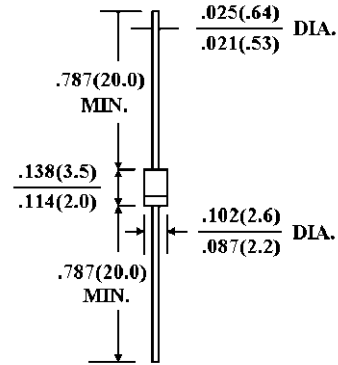
Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color Band denotes cathode

Mounting Position: Any

Weight: 0.0064 ounce, 0.181 gram

R-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^{\circ}\text{C}$ ambient temperature unless otherwise specified.

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

	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Forward Voltage at 1.0A	1.1							V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_A=75\text{ }^{\circ}\text{C}$	1.0							A
Peak Forward Surge Current, I_{FM} (surge):8.3ms single half sine-wave superimposed on rated load(JEDEC method)	30							A
Maximum Full Load Reverse Current, Full Cycle Average at $T_A=75\text{ }^{\circ}\text{C}$	30							$\mu\text{g A}$
Maximum DC Reverse Current at $T_A=25\text{ }^{\circ}\text{C}$	5.0							$\mu\text{g A}$
At Rated DC Blocking Voltage $T_A=100\text{ }^{\circ}\text{C}$	50							$\mu\text{g A}$
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance R θ_{KJA} (Note 2)	50							$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	-55 to +150							$^{\circ}\text{C}$

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal Resistance Junction to Ambient

* JEDEC Registered Value

RATING AND CHARACTERISTIC CURVES

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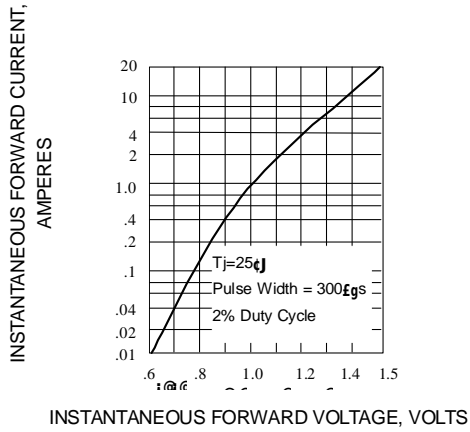


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

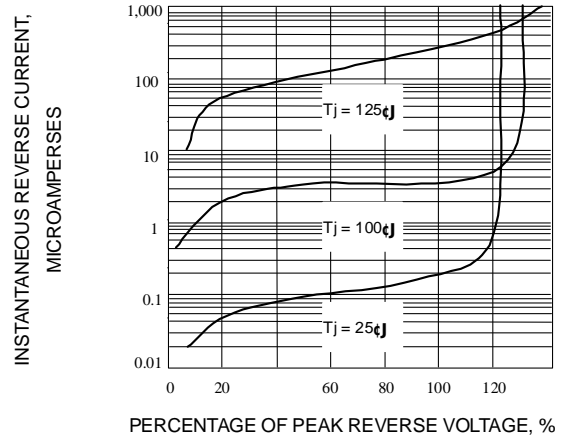


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

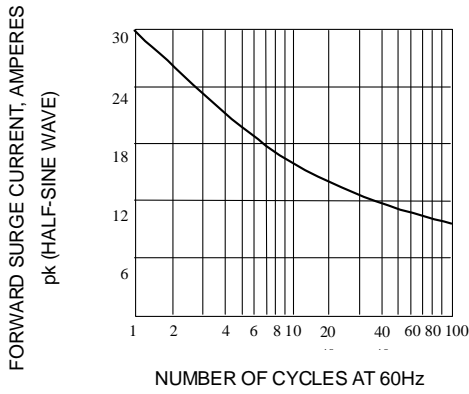


Fig. 3-MAXIMUM OVERLOAD SURGE-CURRENT

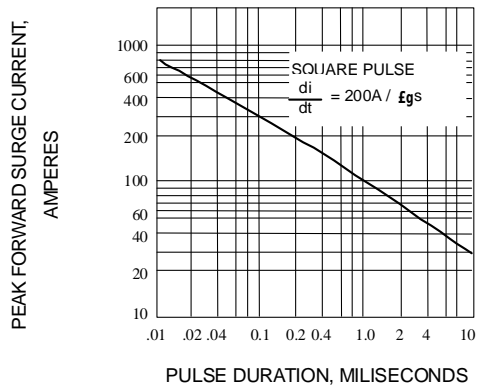


Fig. 4-PEAK FORWARD SURGE CURRENT

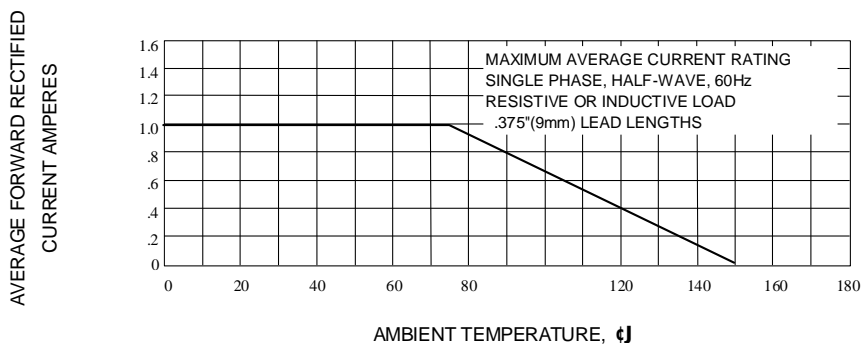


Fig. 5-FORWARD DERATING CURVE