



# 1A1G~1A7G

## MINIATURE GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER

**VOLTAGE** 50 to 1000 Volts    **CURRENT** 1.0 Amperes

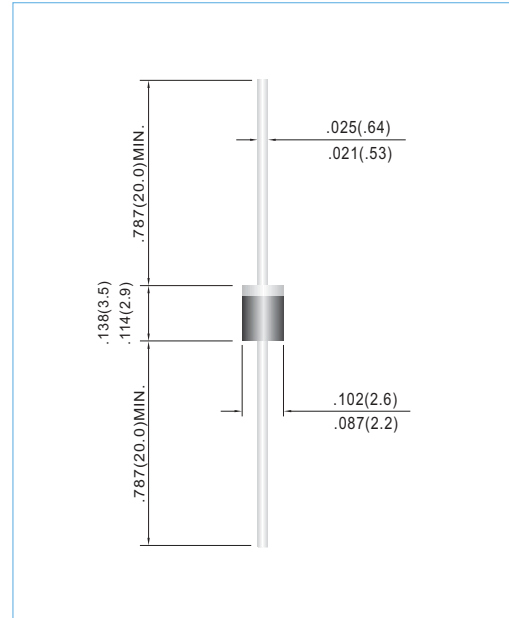
**R-1**    Unit: inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Glass passivated junction version of 1A1G thru 1A7G in R-1 package.
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in comply with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Molded plastic, R-1
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Mounting Position: Any
- Weight: 0.0068 ounce, 0.1937 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	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
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	30							A
Maximum Forward Voltage at 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=100^\circ\text{C}$	$I_R$	50							$\mu\text{A}$
Typical Junction capacitance (Note 1)	$C_J$	15							pF
Typical Thermal Resistance	$R_{\theta JA}$	50							$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

NOTES:

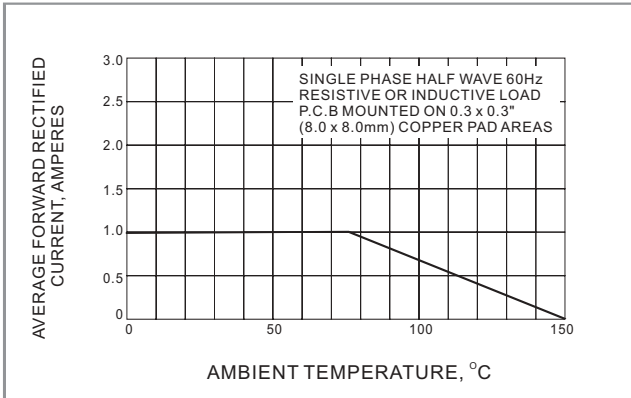
1. Measured at 1MHz and applied reverse voltage of 4.0 VDC.

\*JEDEC Registered Value.

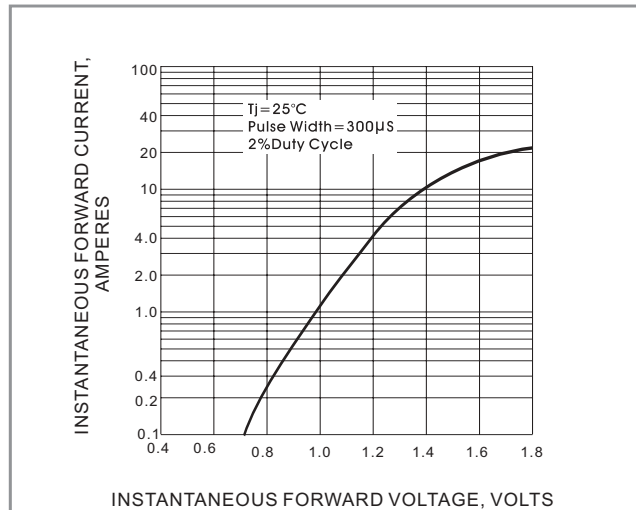


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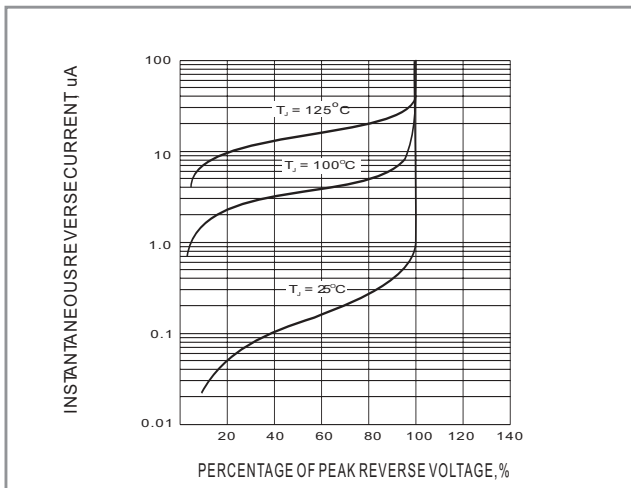
## RATING AND CHARACTERISTIC CURVES



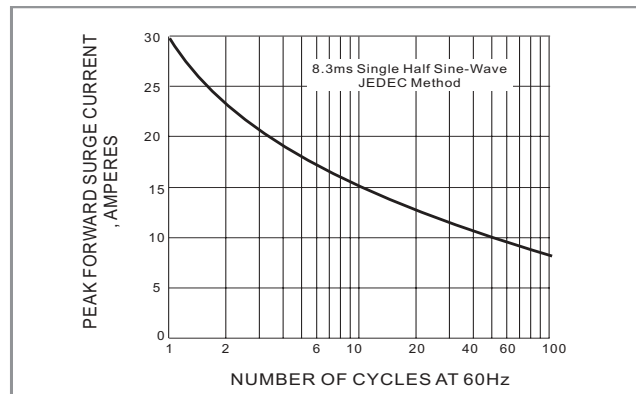
**Fig.1 FORWARD CURRENT DERATING CURVE**



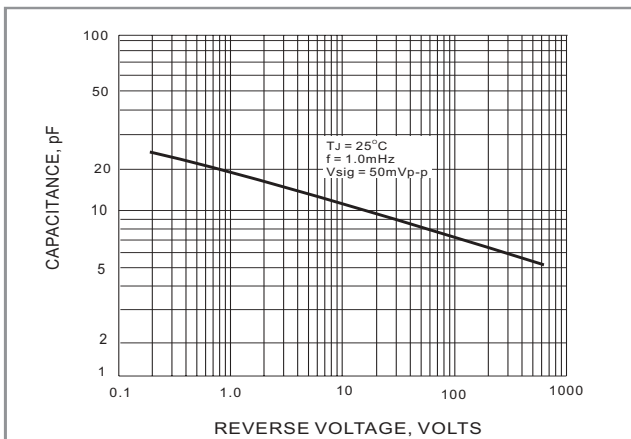
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3-TYPICAL REVERSE CHARACTERISTIC**



**Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig.5 TYPICAL JUNCTION CAPACITANCE**



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## Part No\_packing code\_Version

1A1G\_AX\_00001  
 1A1G\_AX\_10001  
 1A1G\_AY\_00001  
 1A1G\_AY\_10001  
 1A1G\_B0\_00001  
 1A1G\_B0\_10001  
 1A1G\_R2\_00001  
 1A1G\_R2\_10001

For example :

**RB500V-40** **R2** **00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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