

## R1A1G THRU R1A7G

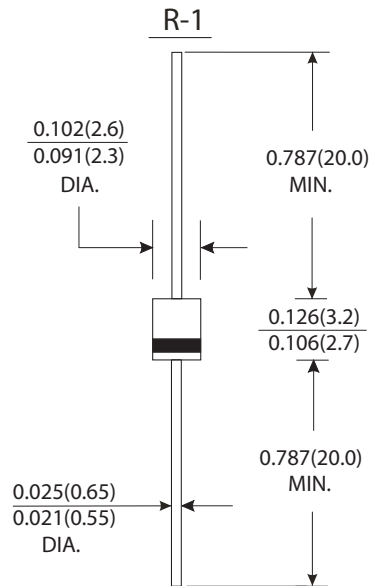
CURRENT 1.0Ampere  
VOLTAGE 50 to 1000 Volts

### Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- High current capability
- Low reverse leakage
- Glass passivated junction
- Low forward voltage drop
- High temperature soldering guaranteed : 350 °C /10 seconds, 0.375"(9.5mm) lead length, 5 lbs, (2.3kg) tension

### Mechanical Data

- Case : R-1 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.007 ounce, 0.19 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

(Ratings at 25 °C ambient temperature unless otherwise specified, Single phase, half wave 60Hz, resistive or inductive load. For capacitive load, derate by 20%)

	Symbols	R1A1G	R1A2G	R1A3G	R1A4G	R1A5G	R1A6G	R1A7G	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length $T_A=25\text{ }^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method)	$I_{FSM}$	25.0							Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.0							Volts
Maximum reverse current at rated voltage	$T_A=25\text{ }^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_A=100\text{ }^\circ\text{C}$	50.0							
Typical thermal resistance (Note 2)	$R_{\theta JA}$	50.0							$^\circ\text{C}/\text{W}$
Typical junction capacitance (Note 1)	$C_J$	15.0							pF
Operating and Storage temperature Range	$T_J$ $T_{STG}$	-65 to +175							$^\circ\text{C}$

#### Notes:

- (1) Measured at 1MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. mounted



# RATINGS AND CHARACTERISTIC CURVES R1A1G THRU R1A7G

FIG.1-FORWARD CURRENT DERATING CURVE

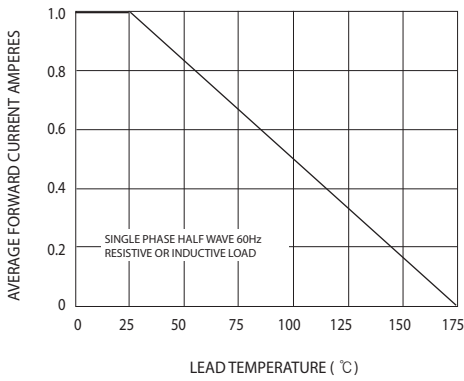


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

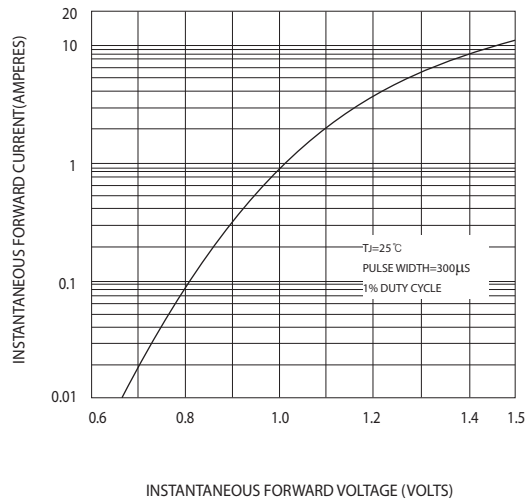


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

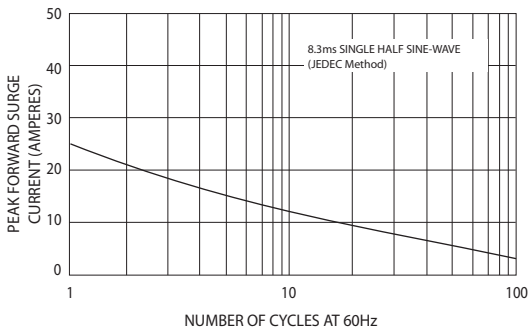


FIG.4-TYPICAL REVERSE CHARACTERISTICS

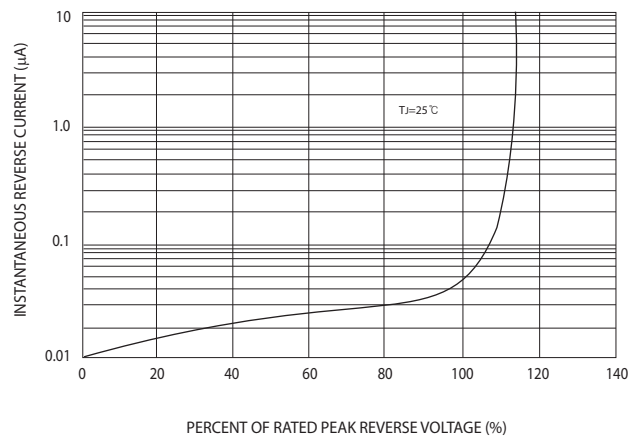


FIG.5-TYPICAL JUNCTION CAPACITANCE

