

1A1G THRU 1A7G

GLASS PASSIVATED JUNCTION SILICON RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

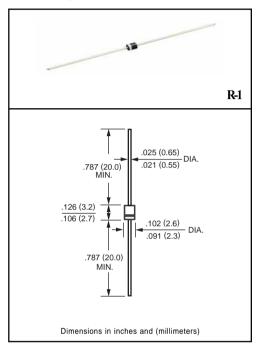
- * High reliability
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic black body
- * Epoxy: Device hasUL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.19 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 25°C	lo	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	25							Amps
Typical Junction Capacitance (Note)	CJ	15						pF	
Typical Thermal Resistance	RθJA	60							°C/W
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 175							۰C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	1A1G	1A2G	1A3G	1A4G	1A5G	1A6G	1A7G	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		VF	1.1							Volts
Maximum DC Reverse Current	@Ta = 25°C		5.0							uAmps
at Rated DC Blocking Voltage	@TA = 100°C	la la	50							
Maximum Full Load Reverse Current Full Cycle Average .375" (9.5mm) lead length at TL = 75°C		lR	30							uAmps

RATING AND CHARACTERISTIC CURVES (1A1G THRU 1A7G)

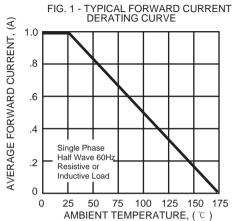


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD PEAK FORWARD SURGE CURRENT, (A) SURGE CURRENT 50 8.3ms Single Half Sine-Wave 40 (JEDED Method) 30 20 10

6 810

NUMBER OF CYCLES AT 60Hz

20

40 6080100

0

1

2

4

FIG. 2 - TYPICAL INSTANTANEOUS FORWARD **CHARACTERISTICS** 20 10 INSTANTANEOUS FORWARD 4 CURRENT, (A) 2 1.0 .4 .2 TJ = 25 ℃ .1 Pulse Width=300uS 1% Duty Cycle .04 .02 .01 .8 1.2 1.4 1.5 .6 1.0 INSTANTANEOUS FORWARD VOLTAGE. (V)

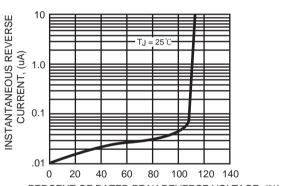


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

