1A1 THRU 1A7

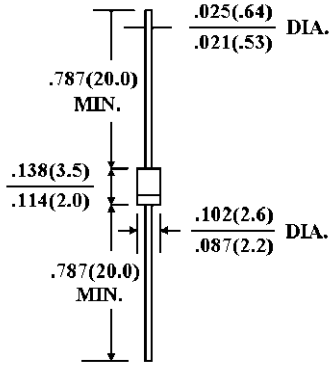
MINIATURE PLASTIC SILICON RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 1.0 Ampere

FEATURES

- High reliability
- Low leakage
- Low forward voltage drop
- High current capability
- Exceeds environmental standards of MIL-S-19500/228

R-1



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic black body, R-1

Epoxy: UL 94V-O rate flame retardant

Lead: MIL-STD-202E method 208C guaranteed

Mounting Position: Any

Weight: 0.0064 ounce, 0.181 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	1A1	1A2	1A3	1A4	1A5	1A6	1A7	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 Average Forward Rectified Current .375"(9.5mm) lead lengths T_A=25 ¢J	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A DC	1.1							V
Maximum DC Reverse Current T_A=25 ¢J At Rated DC Blocking Voltage T_A=100 ¢J	5.0 500							£g A £g A
Maximum Full Load Reverse Current Full Cycle Average .375”(9.5mm) lead length T_L=76 ¢J	100							£g A
Typical Junction capacitance (Note 1)	15							pF
Typical Thermal Resistance R £KJA	60							¢J/W
Operating and Storage Temperature Range T_J,T_{STG}	-55 to +150							¢J

NOTES:

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

RATING AND CHARACTERISTIC CURVES

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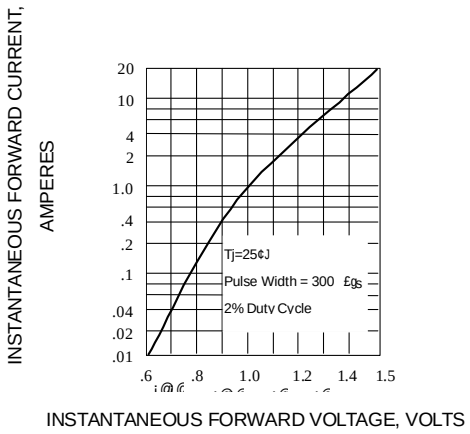

Fig. 1-TYPICAL FORWARD CHARACTERISTICS

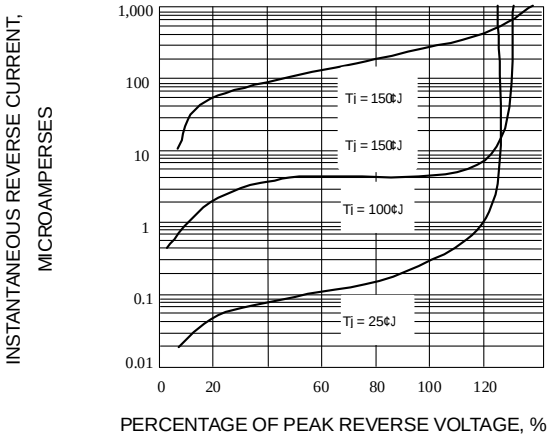

Fig. 2-TYPICAL REVERSE CHARACTERISTICS

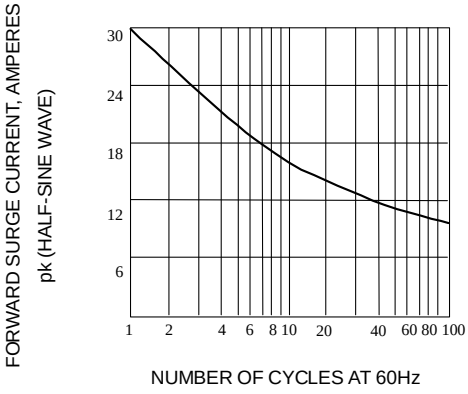

Fig. 3-MAXIMUM OVERLOAD SURGE-CURRENT

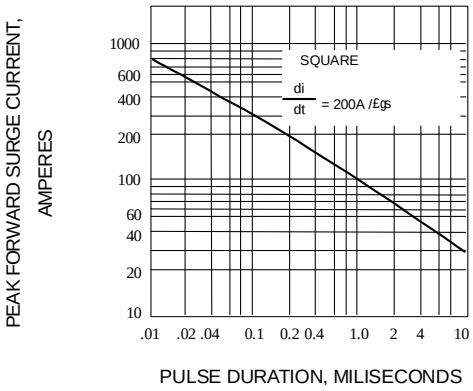

Fig. 4-PEAK FORWARD SURGE CURRENT

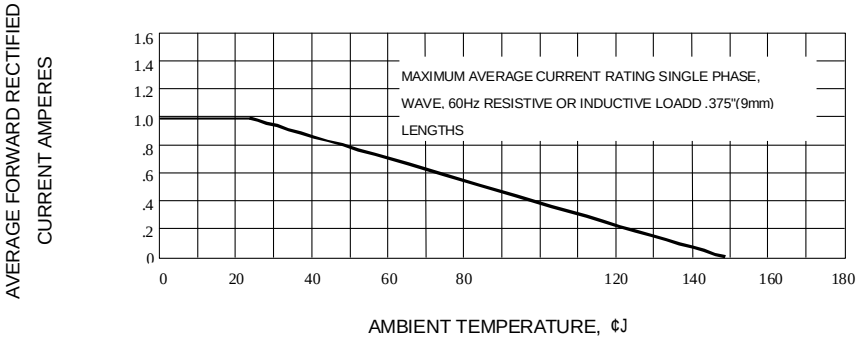

Fig. 5-FORWARD DERATING CURVE