

1A1 thru 1A7

PLASTIC SILICON RECTIFIER



**CHENG-YI
ELECTRONIC**



FEATURE

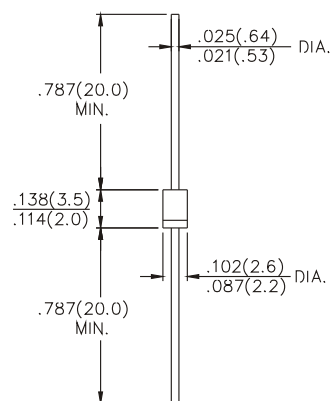
- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

MECHANICAL DATA

- Case: Molded plastic use UL 94V-0 recognized Flame retardant epoxy
- Terminals: Axial leads, solderable per MIL-STD-202, method 208
- Polarity: Color band denotes cathode
- Mounting Position: Any

VOLTAGE RANGE
50 TO 1000 Volts
CURRENT
1.0 Ampere

R-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	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 3/8 Lead at $T_A = 75^\circ\text{C}$	1.0							A
Maximum Overload Surge 8.3 ms single half sine-wave	50							A
Maximum Forward Voltage at 1.0A AC and 25°C	1.1							V
Maximum Full Load Reverse Current, Full Cycle Average at 75°C Ambient	30							μA
Maximum DC Reverse Current at 25°C at Rated DC Blocking Voltage at 75°C	5.0							μA
	50.0							μA
Typical Junction Capacitance (Note 1)	30							pF
Operating and Storage Temperature Range	-65 to +175							$^\circ\text{C}$

Notes : 1. Measured at 1.0MHz and applied reverse voltage of 4.0 VDC.

* JEDEC Registered Value.

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RATING AND CHARACTERISTICS CURVES 1A1 THRU 1A7

Fig.1 - TYPICAL REVERSE CHARACTERISTICS

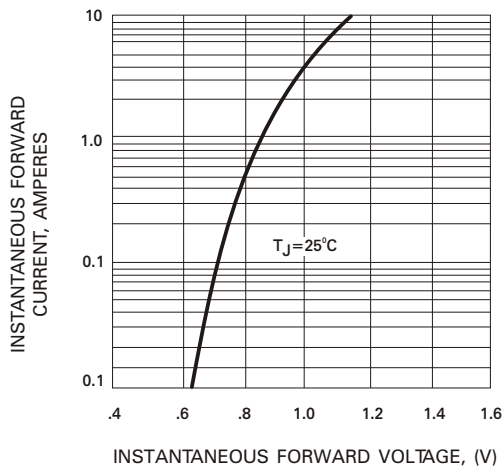


Fig.2 - PAK FORWARD SURGE CURRENT

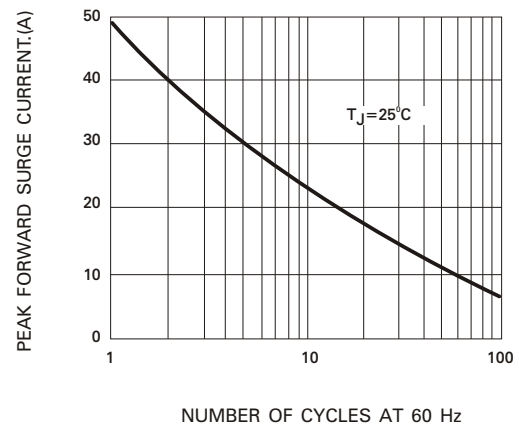


Fig.3 - FORWARD CURRENT DERATING CURVE

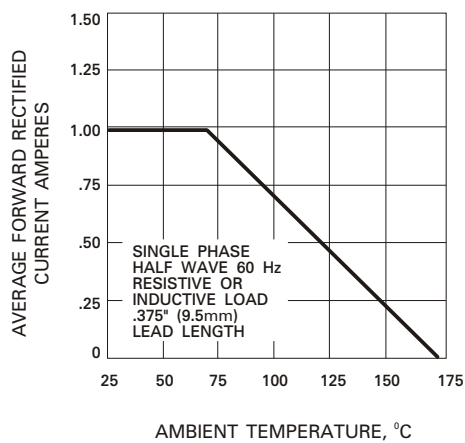


Fig.4 - TYPICAL JUNCTION CAPACITANCE

