

# 1A1 THRU 1A7

## GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

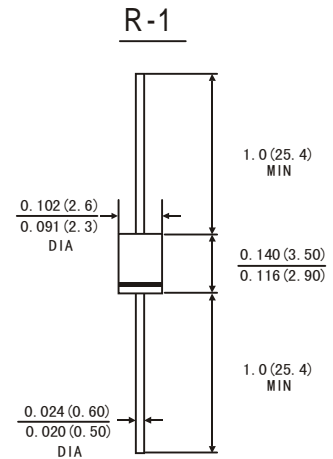
Forward Current - 1.0Ampere

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High reliability

### 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:* 0.007ounce, 0.19 gram



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%.)

	<i>Symbols</i>	<i>1A1</i>	<i>1A2</i>	<i>1A3</i>	<i>1A4</i>	<i>1A5</i>	<i>1A6</i>	<i>1A7</i>	<i>Units</i>
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length I <sub>A</sub> =25°C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current (8.3ms half sine-wave superimposed on rated load (JEDEC method)at T <sub>A</sub> =75°C	I <sub>FSM</sub>	25.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.0							Volts
Maximum reverse current at rated voltage	I <sub>R</sub>	5.0							μA
		50.0							
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	50.0							°C/W
Typical junction capacitance (Note 1)	C <sub>J</sub>	15.0							pF
Operating and Storage temperature Range	T <sub>J</sub> T <sub>STG</sub>	-50 to +175							°C

Note: 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 1A1 THRU 1A7

FIG. 1-FORWARD CURRENT DERATING CURVE

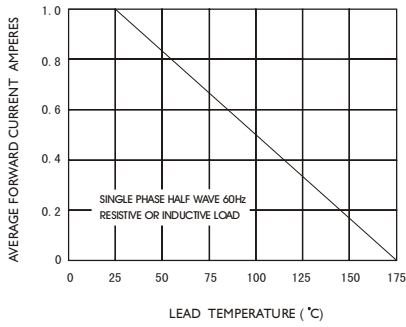


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

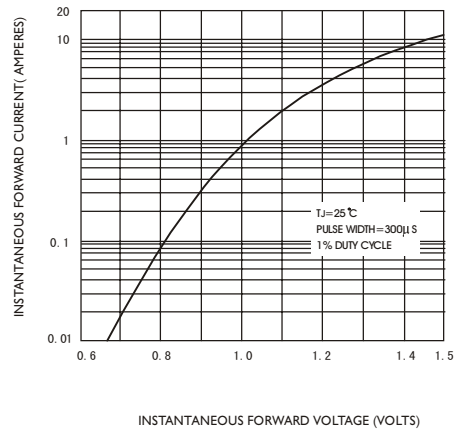


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

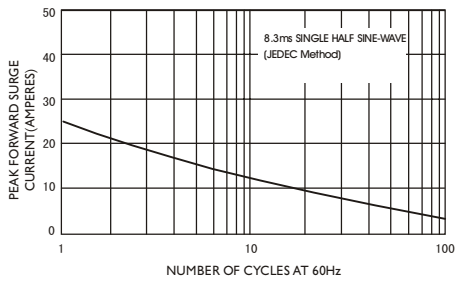


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

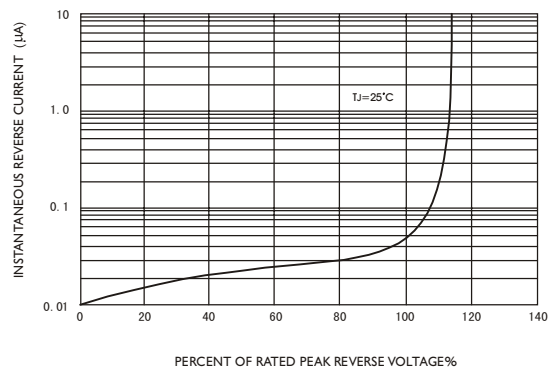


FIG. 5-TYPICAL JUNCTION CAPACITANCE

