# 1A1 THRU 1A7

#### **MINIATURE PLASTIC RECTIFIER** VOLTAGE50 TO 1000V **CURRENT 1.0A**



### **FEATURE**

**MECHANICAL DATA** 

Mounting positionany

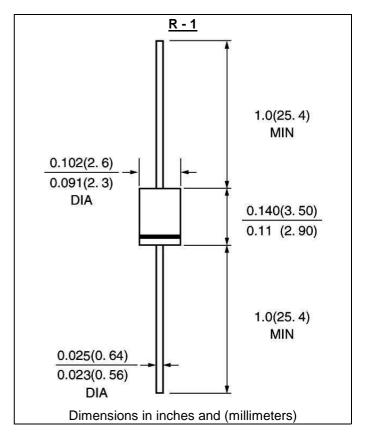
Retardant Epoxy

Polaritycolor band denotes cathode

TerminalPlated axial leads solderable per

MIL-STD 202E, method 208C CaseMolded with UL-94 Class V-0 recognized Flame

Molded case feature for auto insertion High current capability Low leakage current High surge capability High temperature soldering guaranteed 250°C/10sec/0.375"lead length at 5 lbs tension



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	1A1	1A2	1A3	1A4	1A5	1A6	1A7	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =25°C,	lf(av)	1.0							A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	lfsm	25.0							A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.1							V
Maximum DC Reverse Current Ta =25°C	lr	5.0							μA
at rated DC blocking voltage Ta =100°C		50.0							μA
Typical Junction Capacitance (Note 1)	Cj	15.0							pF
Typical Thermal Resistance (Note 2)	R(ja)	50.0							°C/V
Storage and Operation Junction Temperature	Tstg	-50 to +150							°C

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc

2. Thermal Resistance from Junction to Ambient at 0.375"lead length, P.C. Board Mounted

### RATINGS AND CHARACTERISTIC CURVES 1A1 THRU 1A7

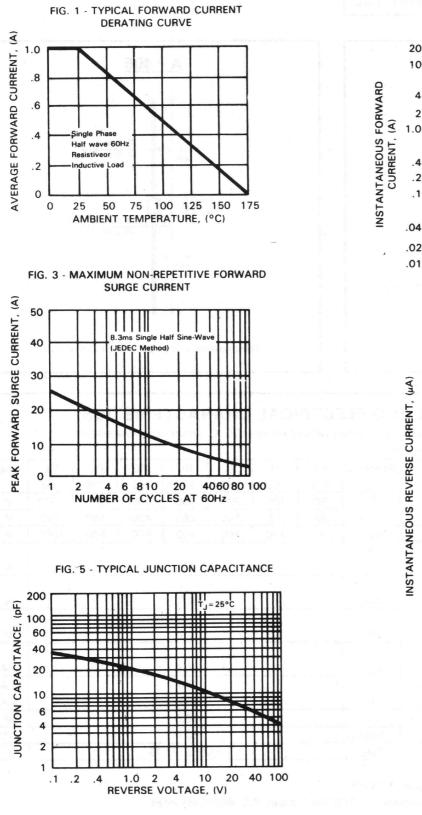
20

10

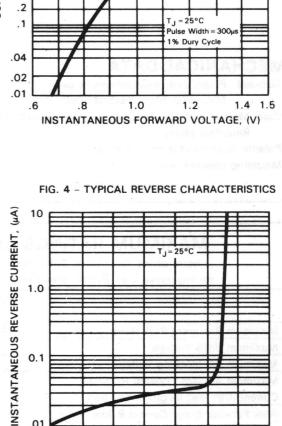
4

2

.4



#### FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



0.1

.01

0

20

40

60

80

PERCENT OF RATED PEAK

**REVERSE VOLTAGE, (%)** 

100

120 140

<sup>1</sup> Rev.A4