

## 1N4001A THRU 1N4007A

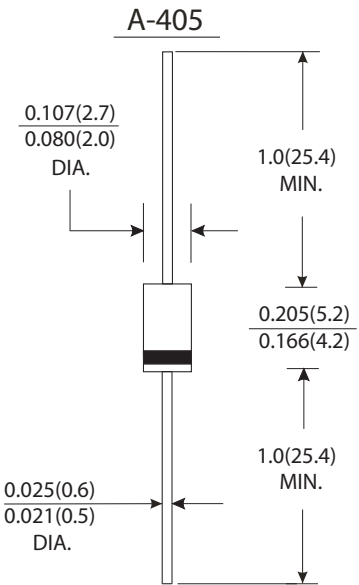
CURRENT 1.0 Ampere  
VOLTAGE 50 to 1000 Volts

### 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 : A-405 molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.008 ounce, 0.23 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%)

	Symbols	1N 4001A	1N 4002A	1N 4003A	1N 4004A	1N 4005A	1N 4006A	1N 4007A	Units
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 T <sub>A</sub> =75 °C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.1							Volts
Maximum reverse current at rated voltage	T <sub>A</sub> =25 °C	5.0							μA
	T <sub>A</sub> =100 °C	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>	-65 to +175							°C

#### Notes:

- (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 1N4001A THRU 1N4007A

FIG.1-FORWARD CURRENT DERATING CURVE

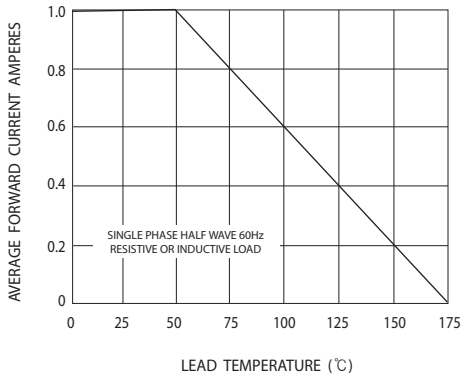


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

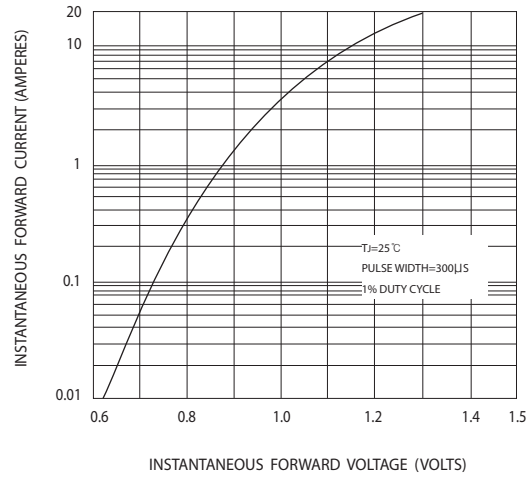


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

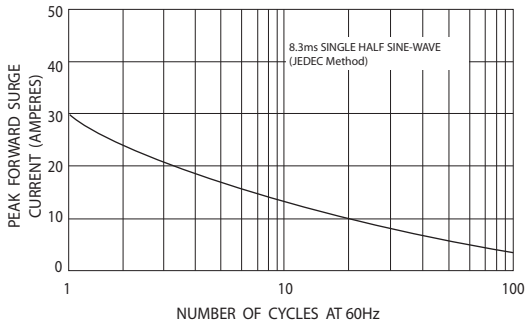


FIG.4-TYPICAL REVERSE CHARACTERISTICS

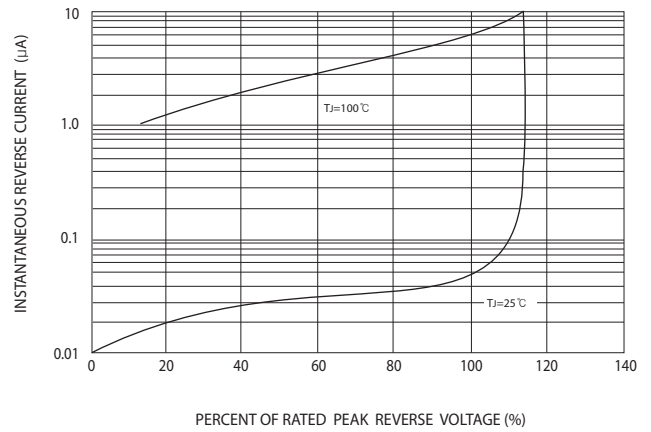


FIG.5-TYPICAL JUNCTION CAPACITANCE

