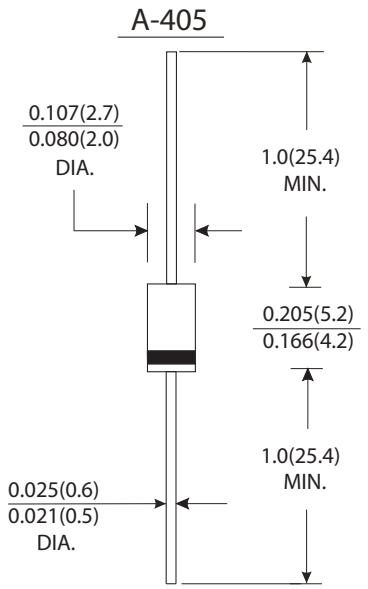
DEC

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



Dimensions in inches and (millimeters)

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

Maximum Ratings And Electrical Characteristics

(Ratings at 25℃ 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_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms half sing wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
Maximum reverse current at rated voltage T_A=25℃	I_R	5.0							μA
Maximum reverse current at rated voltage T_A=100℃	I_R	50.0							μA
Typical thermal resistance (Note 2)	$R\Theta_{JA}$	50.0							℃/W
Typical junction capacitance (Note 1)	C_J	15.0							pF
Operating and Storage temperature Range	T_J T_{STG}	-65 to +175							℃

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

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RATINGS AND CHARACTERISTIC CURVES 1N4001A THRU 1N4007A

FIG.1-FORWARD CURRENT DERATING CURVE

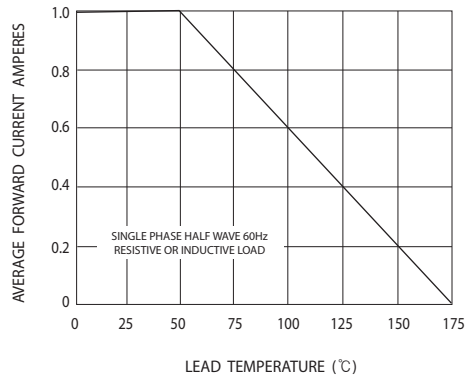

FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

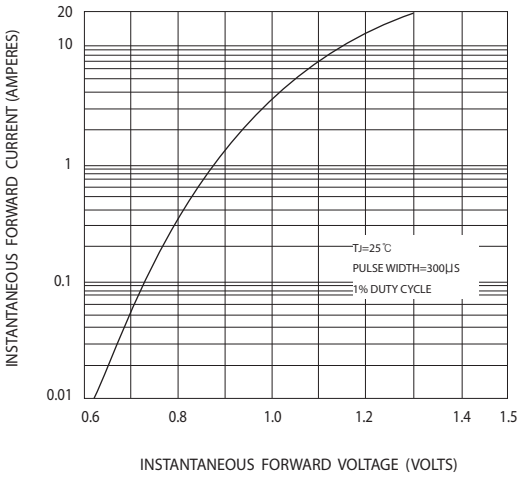

FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

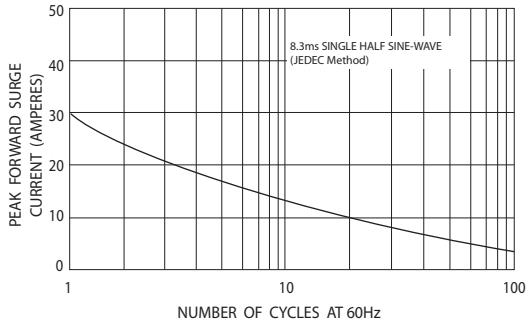

FIG.4-TYPICAL REVERSE CHARACTERISTICS

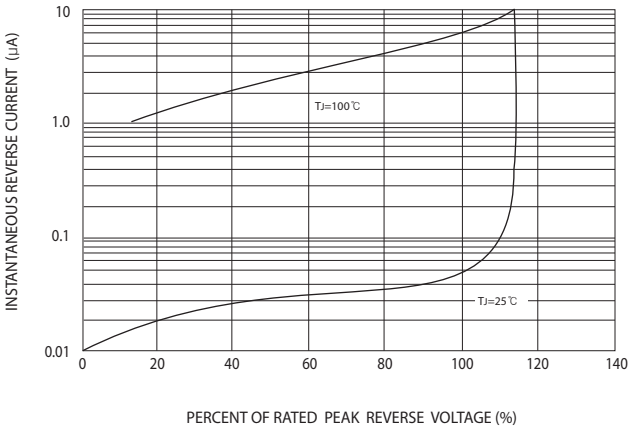

FIG.5-TYPICAL JUNCTION CAPACITANCE