

1N4001S THRU 1N4007S

CURRENT 1.0 A
VOLTAGE 50 to 1000 V

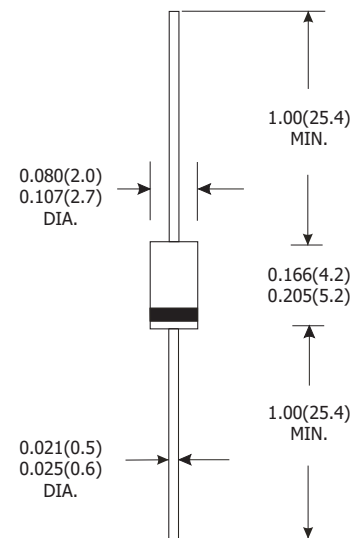
Features

- 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

A-405



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%)

Items	Symbols	1N4001S	1N4002S	1N4003S	1N4004S	1N4005S	1N4006S	1N4007S	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length T _A =55°C	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) at T _A =75°C	I _{FSM}	30							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.0							V
Maximum reverse current at rated DC blocking voltage	T _A =25°C	5.0							μA
	T _A =100°C	50							
Typical thermal resistance (Note 2)	R _{θJA}	50							°C/W
Typical junction capacitance (Note 1)	C _J	15							pF
Operating junction and storage temperature range	T _J , T _{STG}	-50 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 1N4001S THRU 1N4007S

FIG.1-FORWARD CURRENT DERATING CURVE

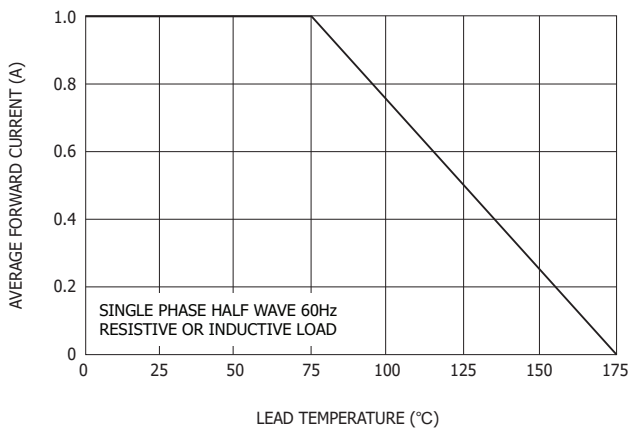


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

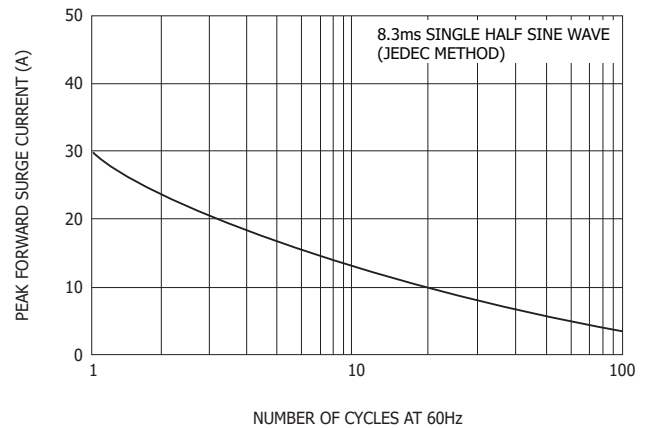


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

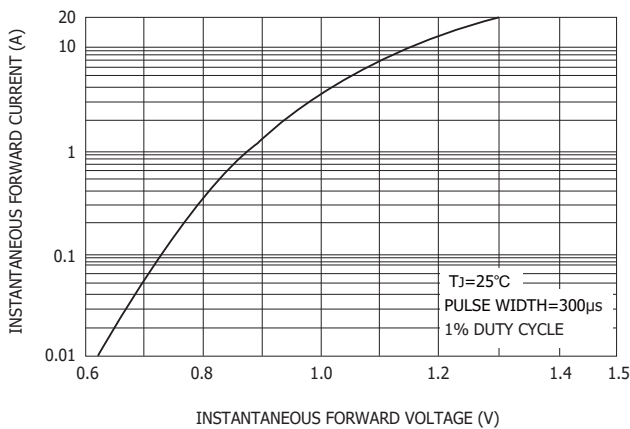


FIG.4-TYPICAL REVERSE CHARACTERISTICS

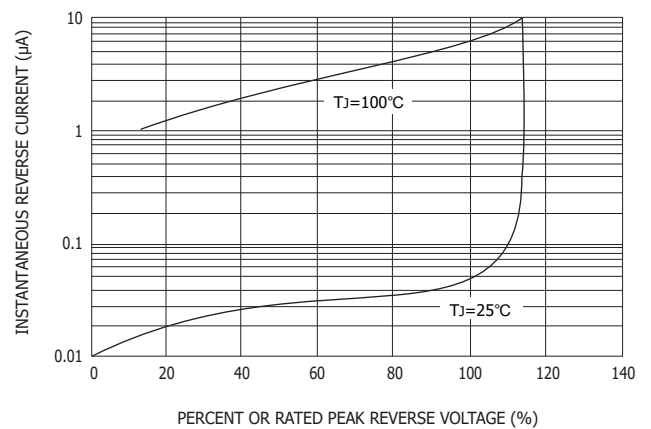


FIG.5-TYPICAL JUNCTION CAPACITANCE

