



1N4001 thru 1N4007

PLASTIC SILICON RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 1.0 Ampere

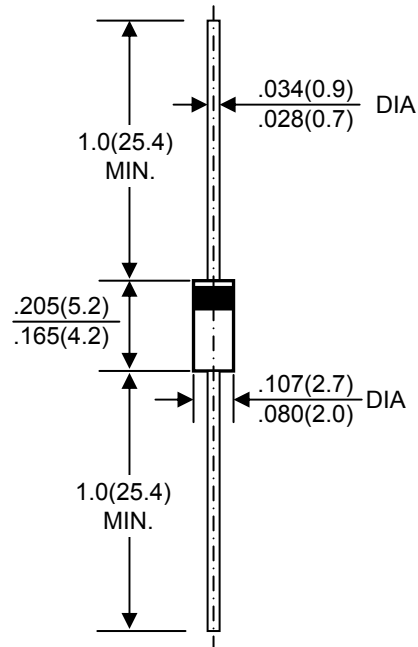
FEATURES

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces , 0.34 grams
- Mounting position :Any

DO- 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNIT
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 @T _A =75 °C	I _(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A DC	V _F	1.0							V
Maximum DC Reverse Current @T _J =25°C	I _R	5.0							μA
at Rated DC Blocking Voltage @T _J =100°C		50							
Typical Junction Capacitance (Note1)	C _J	15							pF
Typical Thermal Resistance (Note2)	R _{θJC}	26							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTE:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction to case

3.The typical data above is for reference only(典型值仅供参考).

FIG. 1 - FORWARD CURRENT DERATING CURVE

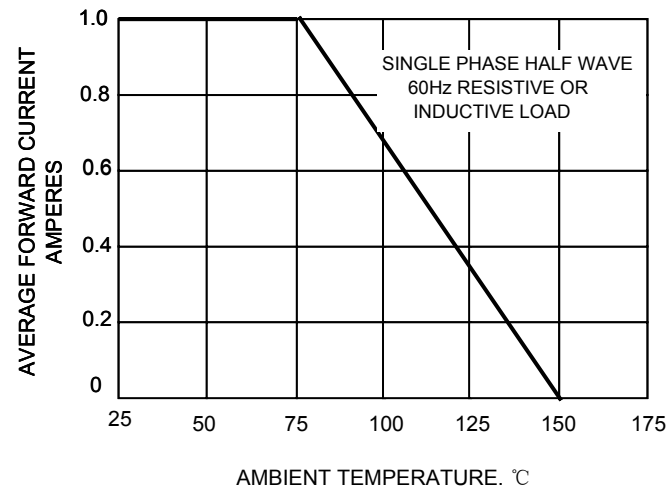


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

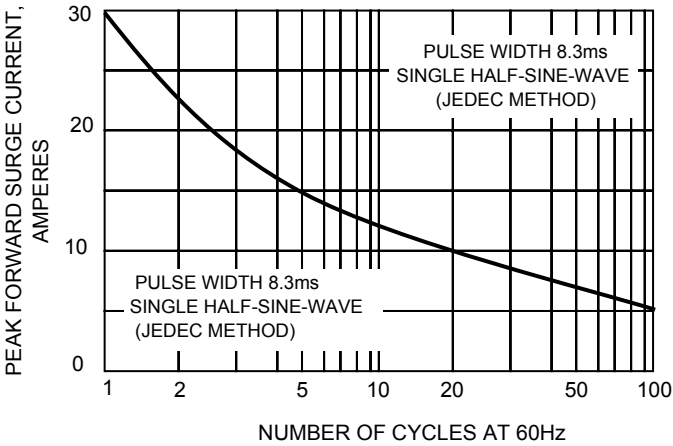


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

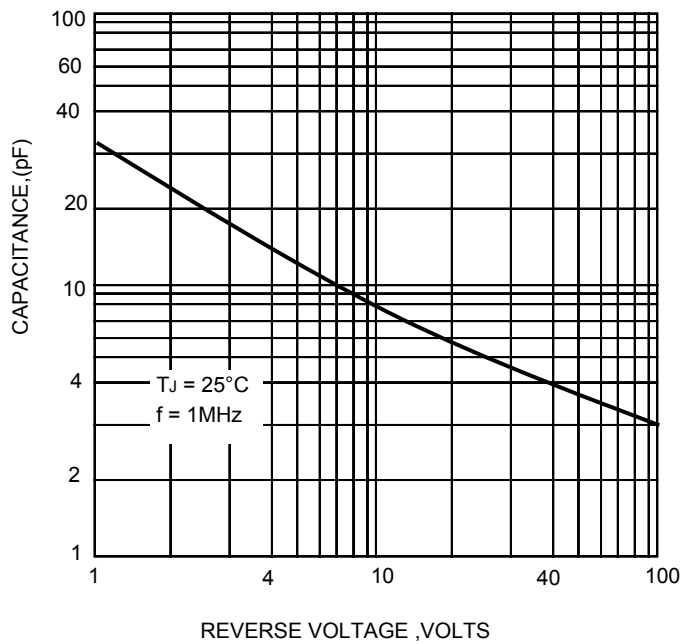
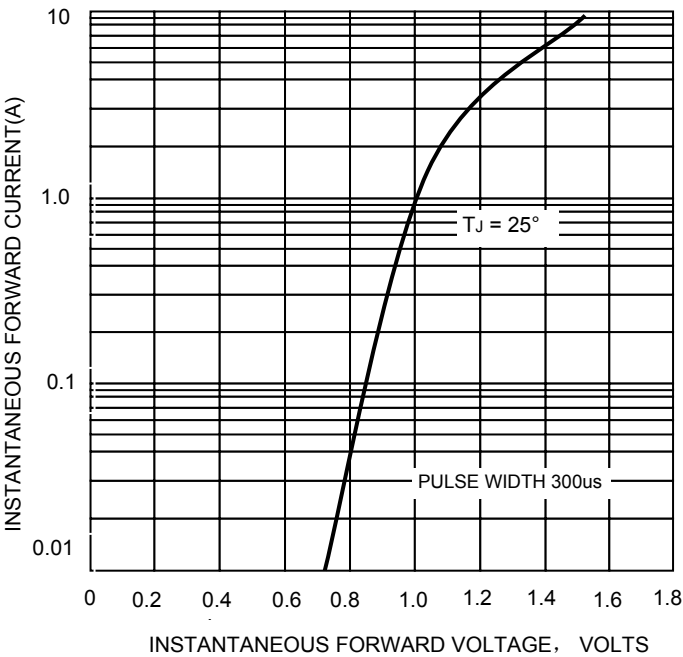


FIG.4 - TYPICAL FORWARD CHARACTERISTICS





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