1N4001-------1N4007

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 1.0 A

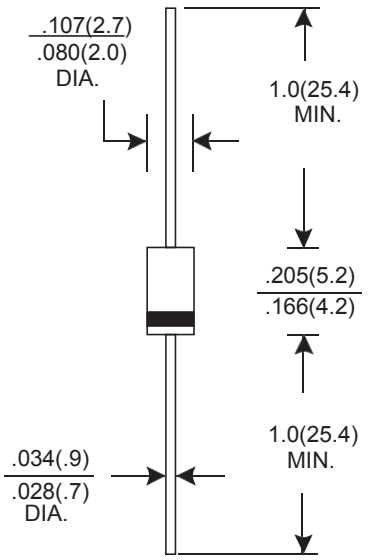
FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.34 grams
* Both normal and Pb free product are available:
* Normal:80~95%Sn,5~20%Pb
* Pb free:99 Sn above can meet Rohs enviroment substance directive request

DO-41



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

TYPE NUMBER		1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximun Recurrent Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
Maximum average forw ard rectified Current9.5mm lead length,@T_A=75?		1.0							A
Peak Forward Surge Current,8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		30							A
Maximum Instantaneous Forward Voltage at 1.0A		1.0							V
Maximum DC Reverse Current	Ta=25?	5.0							μA
at Rated DC Blocking Voltage	Ta=100?	50							μA
Typical Junction Capacitance(Note 1)		15							Pf
Typical Thermal Resistance R0JA(Note 2)		50							?IW
Operating and Storage Temperature RangeTJ,Tstg		-65--+150							?

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

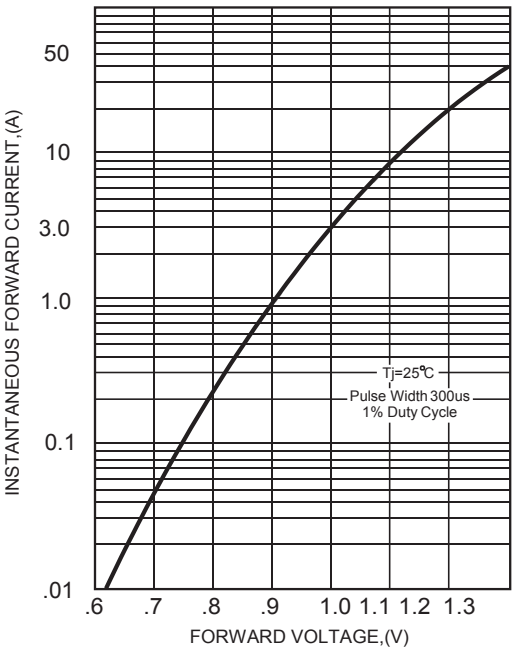


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

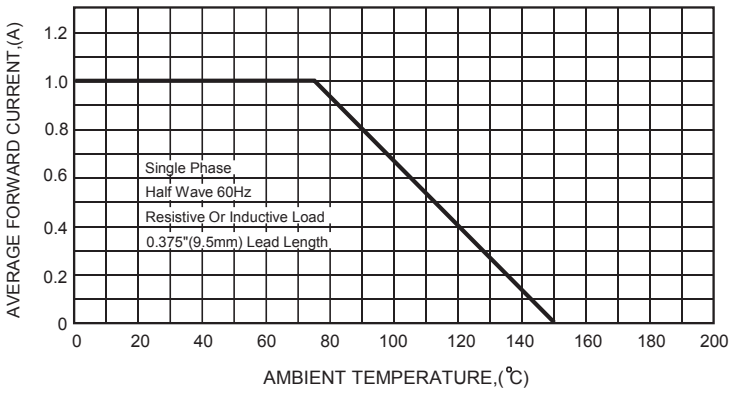


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

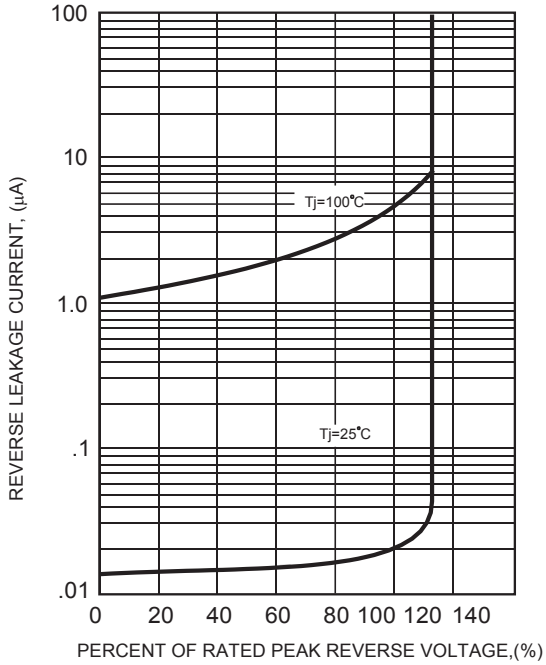


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

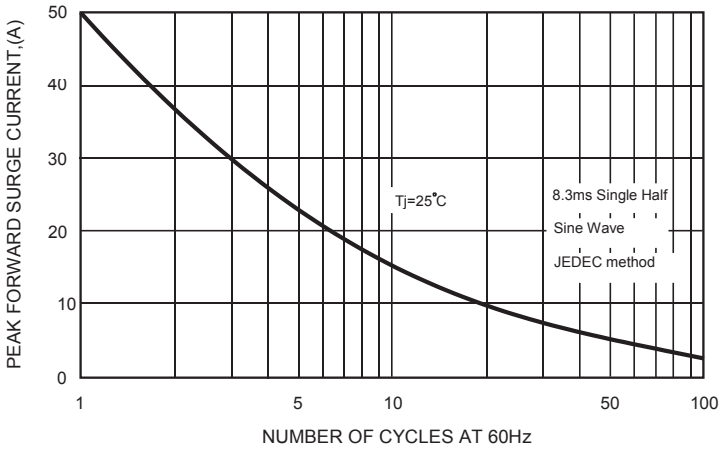


FIG.5-TYPICAL JUNCTION CAPACITANCE