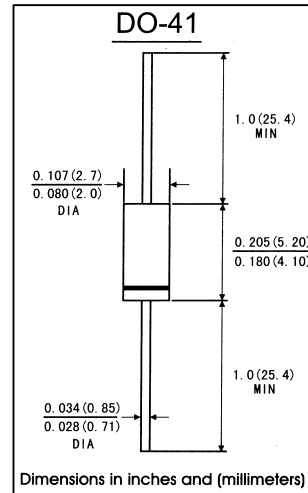


## FEATURES

- . 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 temperature soldering guaranteed: 250°C/10 seconds, 0.375"(9.5mm)lead length,5lbs.(2.3kg).

## MECHANICAL DATA

- . **Case:** JEDEC DO-41 molded plastic body
- . **Terminals:** lead solderable per MIL-STD-750,method 2026
- . **Polarity:** color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.012 ounce, 0.33 gram



## 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	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Maximum reurrent 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 at 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)T <sub>A</sub> =75°C	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V <sub>F</sub>	1.1							Volts
Maximum reverse current at rated DC blocking voltage	T <sub>A</sub> =25°C	5.0							μA
	T <sub>A</sub> =100°C	50.0							
Typeical thermal resistance(Note 2)	R <sub>θ</sub> JA	50.0							°C/W
	R <sub>θ</sub> JL	25.0							
Typical junction Capacitance(Note 1)	C <sub>J</sub>	15.0							pF
Maximum DC Blocking Voltage temperature	T <sub>A</sub>	+150							°C
Operating and storage temperature range	T <sub>J</sub>	-50 to +175							°C
	T <sub>STG</sub>								

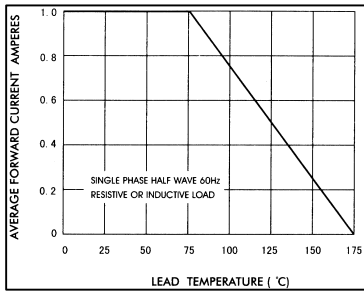
**Notes:** 1. Measured at 1MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance from juntuon to ambient and from junction lead at 0.375"(9.5mm)lead length,

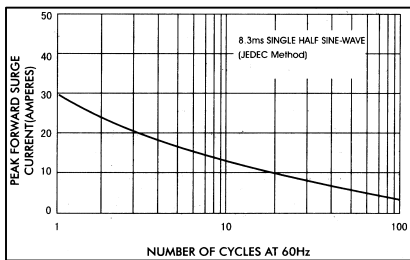
P.C.B. Mounted

### RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

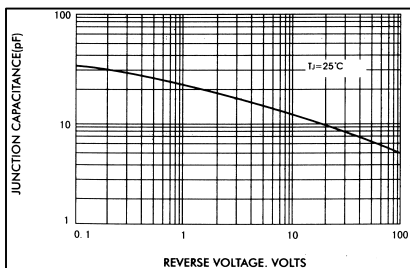
**FIG.1-FORWARD CURRENT DERATING CURVE**



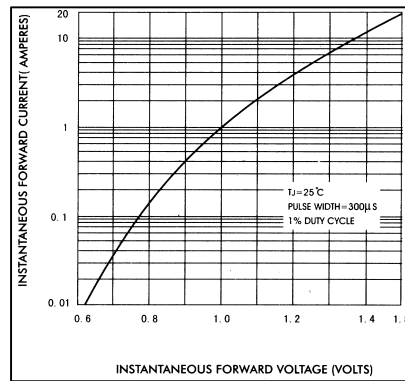
**FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**



**FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

