CE

CHENYI ELECTRONICS

1N4001 THRU 1N4007

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0Ampere

FEATURES

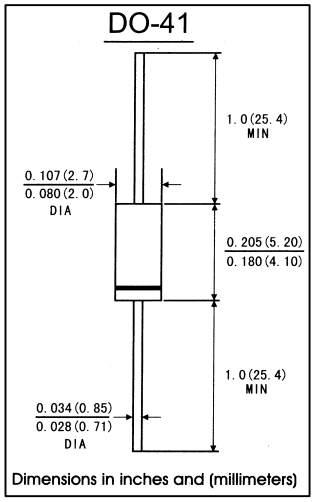
. The plastic package carries Underwrites Laboratory Flammability Classification 94V-0

. Construction utilizes void-free molded plastic technique

. Low reverse leakage

. High forward surge current capability

. High temperature soldering guaranteed: 250℃/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℃ 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_{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 at T_A=75℃	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms half sing-wave superimposed on rated load (JEDEC method)T_A=75℃	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	1.1							Volts
Maximum reverse current at rated DC blocking voltage TA=25℃	I_R	5.0							μA
Maximum reverse current at rated DC blocking voltage TA=100℃	I_R	50.0							μA
Typeical thermal resistance(Note 2)	$R\theta_{JA}$	50.0							℃/W
Typeical thermal resistance(Note 2)	$R\theta_{JL}$	25.0							℃/W
Typical junction Capacitance(Note 1)	C_J	15.0							pF
Maximum DC Blocking Voltage temperature	T_A	+150							℃
Operating and storage temperature range	T_J T_{STG}	-50 to +175							℃

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

2.Thermal resistance from juntion to ambient and from junction lead at 0.375"(9.5mm)lead length, P.C.B. Mounted

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RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

FLG.1-FORWARD CURRENT DERATING CURVE

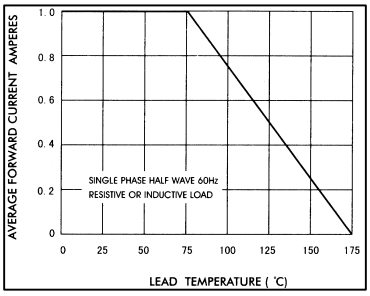


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

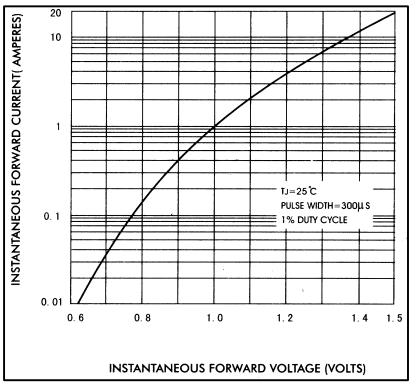


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

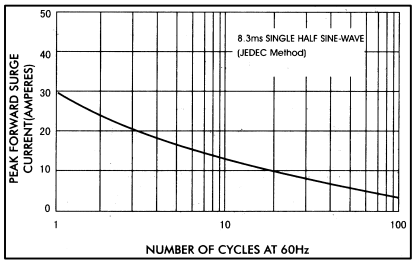


FIG.4-TYPICAL REVERSE CHARACTERISTICS

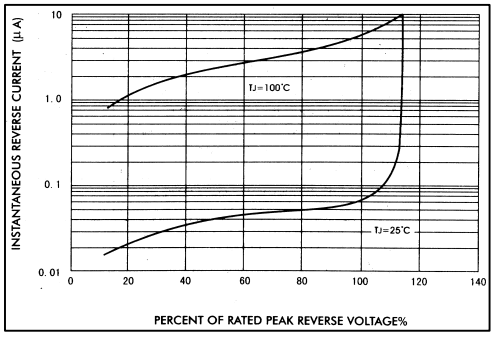
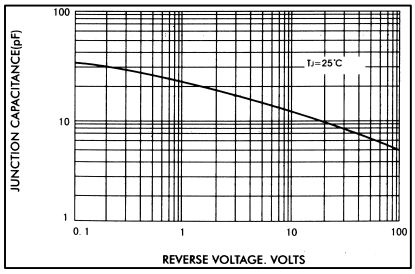


FIG.5-TYPICAL JUNCTION CAPACITANCE



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