

1N4001 THRU 1N4007

SILICON RECTIFIERS

FEATURES:

- Low cost
- High surge current capability
- Low leakage current
- Low forward voltage drop
- Diffused junction

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

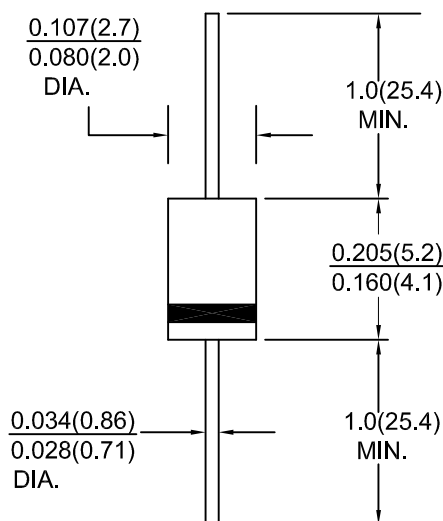
Terminals : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed

Polarity : Color band on body denotes cathode

Mounting Position : Any

Weight : 0.33 gram

DO-204AL(DO-41)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

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

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Maximum recurrent 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 at $T_a=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage drop at 1.0 A	V_F	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	I_R				5.0	50.0			μA
Typical junction capacitance (NOTE 1)	C_j	15							pF
Operating junction and storage temperature range	T_j, T_{stg}	-65 to +125			-65 to +150				$^\circ\text{C}$

NOTES:

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

RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

