

# 1N4001 THRU 1N4007

## SILICON RECTIFIERS

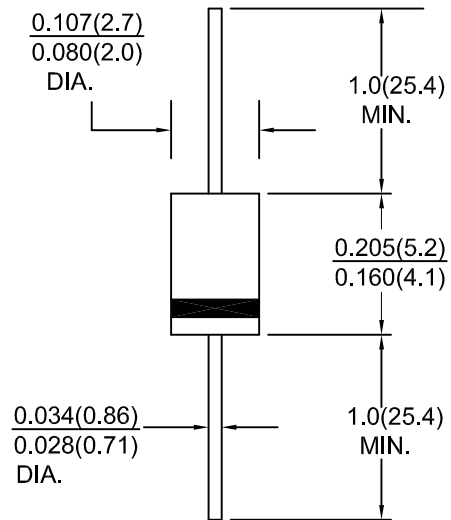
### FEATURES:

- 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 <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 at Ta=75° C	I <sub>O</sub>	1.0							Amps	
Peak forward surge current ,8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I <sub>FSM</sub>	30.0							Amps	
Maximum instantaneous forward voltage drop at 1.0 A	V <sub>F</sub>	1.1							Volts	
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>				5.0	50.0				μ A
Typical junction capacitance (NOTE 1)	C <sub>j</sub>	15							pF	
Operating junction and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-65 to +125			-65 to +150				° C	

#### NOTES:

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

# RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

