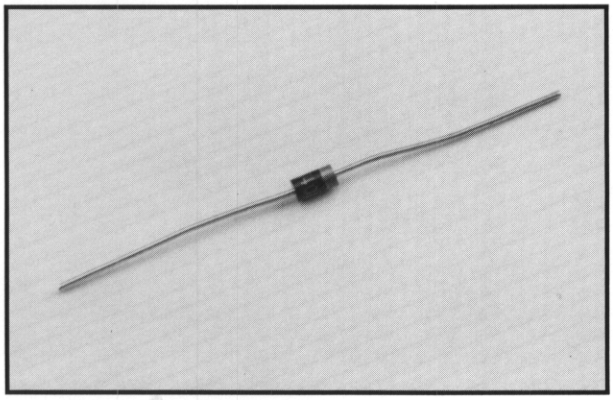
1N4001 Thru 1N4007

1 AMP PLASTIC SILICON RECTIFIER



FEATURES

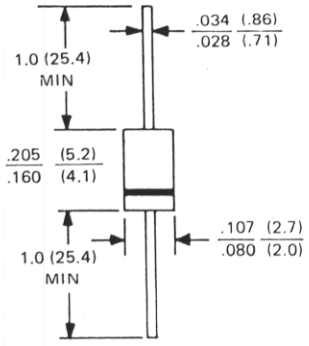
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

- Case: JEDEC DO-41
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams
- Mounting Position: Any

Outline Drawing

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings & Characteristics

- Ratings at 25° C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load
- For capacitive load, derate current by 20%

		1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Lengths @ T_A = 75° C	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I_{FSM}	40							A
Maximum Forward Voltage At 1.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_A = 25°C At Rated DC Blocking Voltage @ T_A = 100°C	I_R	5 50							μA
Typical Junction Capacitance (Note 1) T_A = 25° C	C_J	15							pF
Typical Thermal Resistance (Note 2)	R_{thJA}	26							°C/W
Operating Temperature Range	T_J	-65 to +175							°C
Storage Temperature Range	T_{STG}	-65 to +175							°C

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