

1N4001 1N4007

普通塑封整流二极管
反向电压 50 ---1000 V

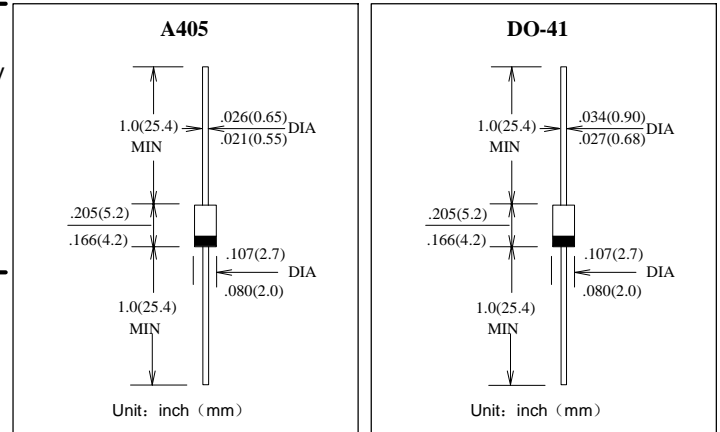
General Purpose Plastic Rectifier
Reverse Voltage 50 to 1000 V
Forward Current 1.0 A

特征 Features

- 低的反向漏电流 Low reverse leakage
- 较强的正向浪涌承受能力 High forward surge capability
- 高温焊接保证 High temperature soldering guaranteed:
250°C/10 秒, 0.375" (9.5mm) 引线长度。
250°C/10 seconds, 0.375" (9.5mm) lead length,
- 引线可承受5 磅 (2.3kg) 拉力。 5 lbs. (2.3kg) tension

机械数据 Mechanical Data

- 端子: 镀锡轴向引线 Terminals: Plated axial leads
- 极性: 色环端为负极
Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any



极限值和温度特性 TA = 25°C 除非另有规定。

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	符号 Symbols	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
最大均方根电压 Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
最大直流阻断电压 Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
最大正向平均整流电流 Maximum average forward rectified current	$I_{F(AV)}$	1.0							A
峰值正向浪涌电流 8.3ms 单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	30							A
典型热阻 Typical thermal resistance	$R_{\theta JA}$	65							°C/W
工作结温和存储温度 Operating junction and storage temperature range	T_j, T_{STG}	-50 --- +150							°C

电特性 TA = 25°C 除非另有规定。

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

	符号 Symbols	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	单位 Unit
最大正向电压 $I_F = 1.0A$ Maximum forward voltage	V_F	1.1							V
最大反向电流 $T_A = 25^\circ C$ Maximum reverse current $T_A = 100^\circ C$	I_R	5.0 100							μA
典型结电容 $V_R = 4.0V, f = 1MHz$ Type junction capacitance	C_j	15							pF

特性曲线 Characteristic Curves

