

1N5400 THRU 1N5408 GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Amperes

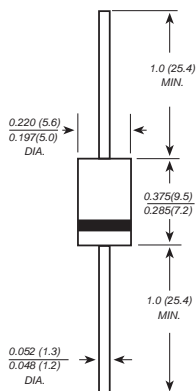
FEATURES

- ◆ The plastic package carries Underwriters 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°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.04 ounce, 1.10 grams

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOLS | 1N 5400 | 1N 5401 | 1N 5402 | 1N 5403 | 1N 5404 | 1N 5405 | 1N 5406 | 1N 5407 | 1N 5408 | UNITS |
|---|-----------------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$ | $I_{(AV)}$ | 3.0 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 100 | | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 3.0A | V_F | 1.2 | | | | | | | | | Volts |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$ | I_R | 10.0 250.0 | | | | | | | | | μA |
| Typical junction capacitance (NOTE 1) | C_J | 30.0 | | | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 20.0 | | | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -65 to +175 | | | | | | | | | $^\circ\text{C}$ |

- Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



RATINGS AND CHARACTERISTIC CURVES 1N5400 THRU 1N5408

