



1N5400 Thru 1N5408

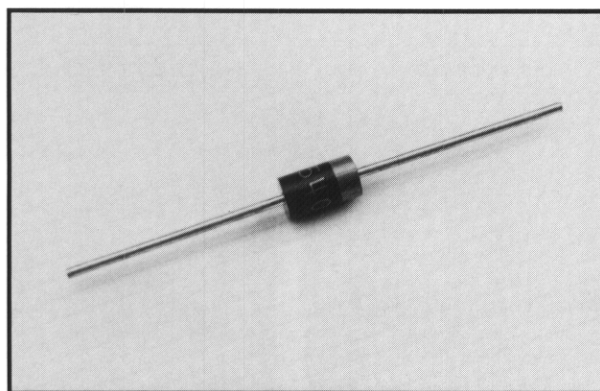
3 AMP PLASTIC SILICON RECTIFIER

FEATURES

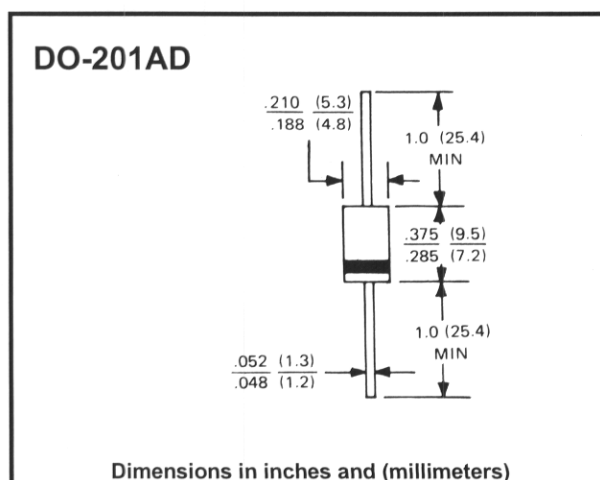
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chloroethene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

- Case: JEDEC DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.04 ounce, 1.1 grams
- Mounting Position: Any



Outline Drawing



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%

| | | 1N5400 | 1N5401 | 1N5402 | 1N5403 | 1N5404 | 1N5405 | 1N5406 | 1N5407 | 1N5408 | Units |
|--|------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current, .500" (12.7mm) Lead Length @ $T_L = 90^\circ\text{C}$ | $I_{(AV)}$ | 3.0 | | | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load | I_{FSM} | 200 | | | | | | | | | A |
| Maximum Forward Voltage At 3.0A DC | V_F | 1.0 | | | | | | | | | V |
| Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ | I_R | 10 | | | | | | | | | μA |
| At Rated DC Blocking Voltage @ $T_A = 150^\circ\text{C}$ | | 100 | | | | | | | | | |
| Typical Junction Capacitance (Note 1) | C_J | 50 | | | | | | 25 | | | pF |
| Typical Thermal Resistance (Note 2) | R_{thJA} | 15 | | | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -65 to +175 | | | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -65 to +175 | | | | | | | | | $^\circ\text{C}$ |

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
2. Thermal resistance Junction to Ambient