

1N4001G THRU 1N4007G

GENERAL PURPOSE SILICON RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

- Glass Passivated Die Construction
- 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-41 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750,

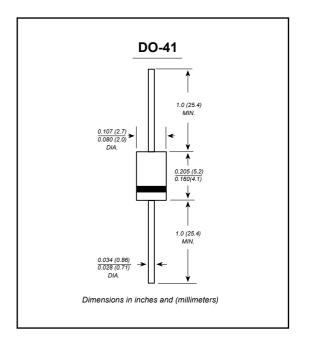
Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.33 grams





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%.

| Characteristic | SYMBOLS | 1N 4001G | 1N 4002G | 1N 4003G | 1N 4004G | 1N 4005G | 1N 4006G | 1N 4007G | UNITS |
|--|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | I(AV) | | 1.0 | | | | | | Α |
| 0.375"(9.5mm) lead length at Ta=75°C | I(AV) | 1.0 | | | | | | | _ A |
| Peak forward surge current | | IFSM 30.0 | | | | | | | |
| 8.3ms single half sine-wave superimposed on | IFSM | | | | | | | | Α |
| rated load (JEDEC Method) | | | | | | | | | |
| Maximum instantaneous forward voltage at 1.0A | VF | 1.0 | | | | | | | V |
| Maximum DC reverse current Ta=25°C | | 5.0 50.0 | | | | | | | μА |
| at rated DC blocking voltage Ta=100°C | l _R | | | | | | | | |
| Typical junction capacitance (NOTE 1) | Cı | 8.0 | | | | | | pF | |
| Typical thermal resistance (NOTE 2) | Reja | 100 | | | | | | K/W | |
| Operating junction and storage temperature range | ТЈ,Тѕтс | -65 to +175 | | | | | | °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



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

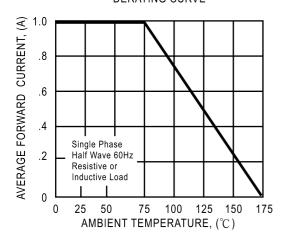


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

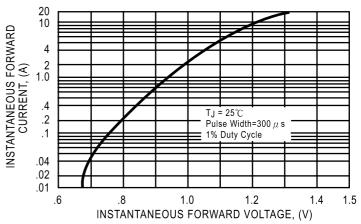


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD

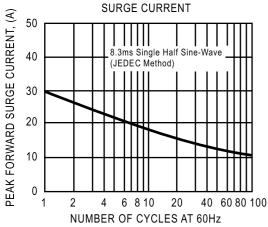


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

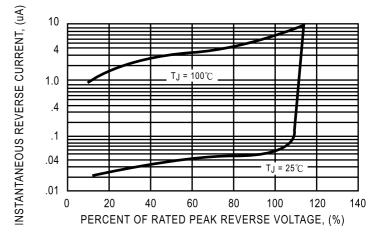


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

