



PINGWEI ENTERPRISE

1N4001SG THRU 1N4007SG

1.0AMP . GLASS PASSIVATED RECTIFIERS

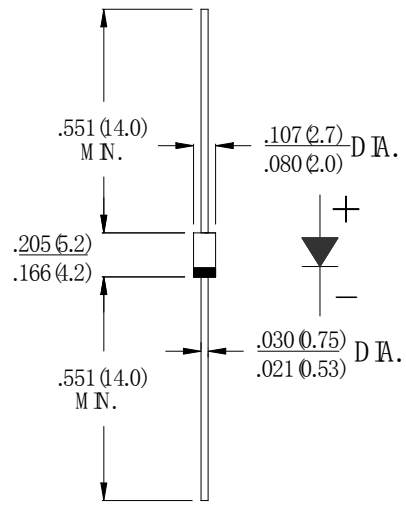
FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension
- . Φ0.6mm leads

MECHANICAL DATA

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- . Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any

A-405



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, derate current by 20%

| Type Number | SYMBOL | 1N 4001SG | 1N 4002SG | 1N 4003SG | 1N 4004SG | 1N 4005SG | 1N 4006SG | 1N 4007SG | 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 length at $T_A = 55^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 30.0 | | | | | | | A |
| Maximum Forward Voltage at 1.0A DC | V_F | 1.0 | | | | | | | V |
| Maximum Forward Voltage at 3.0A DC | V_F | 1.3 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 125^\circ\text{C}$ | I_R | 5.0 100.0 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C_J | 15 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{(JA)}$ | 75 | | | | | | | $^\circ\text{C/W}$ |
| Storage Temperature | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Operation Junction Temperature | T_J | -55 to +175 | | | | | | | $^\circ\text{C}$ |

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.