

## 1N5400G thru 1N5408G

### FEATURES

- \* Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- \* Construction utilizes void-free molded plastic technique
- \* Low reverse leakage
- \* High forward surge capability
- \* Cavity-free glass passivated junction
- \* High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### Mechanical Data

**Case:** JEDEC DO-201AD, molded plastic over glass body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.04 oz., 1.13 g

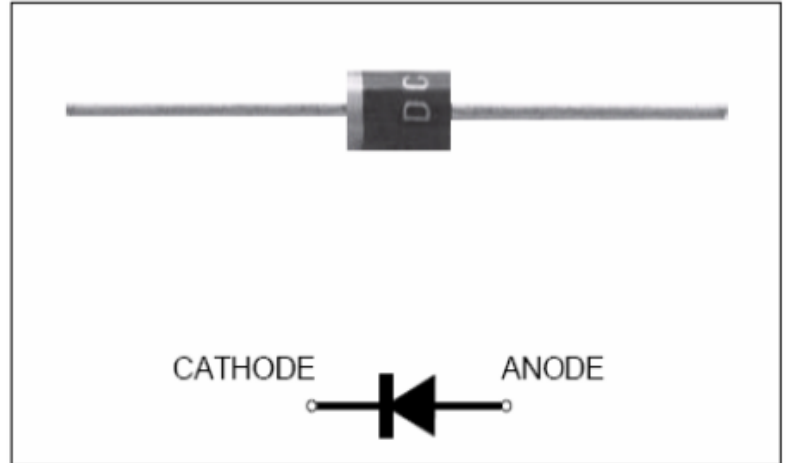
**Handling precaution:** None

### Glass Passivated Junction General

### Purpose Plastic Rectifiers

Reverse Voltage 50 to 1000V

Forward Current 3.0A



We declare that the material of product compliance with RoHS requirements.

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

| Parameter Symbol  | symbol         | 1N54<br>00G | 1N54<br>01G | 1N54<br>02G | 1N54<br>03G | 1N54<br>04G | 1N54<br>05G | 1N54<br>06G | 1N54<br>07G | 1N54<br>08G | Unit                      |
|---|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| Maximum repetitive 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 0.375" (9.5mm) lead length at $T_A = 75^\circ\text{C}$                | $I_{F(AV)}$    | 3.0         |             |             |             |             |             |             |             |             | A                         |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)                | $I_{FSM}$      | 200         |             |             |             |             |             |             |             |             | A                         |
| Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at $T_A = 105^\circ\text{C}$ | $I_{R(AV)}$    | 500         |             |             |             |             |             |             |             |             | $\mu\text{A}$             |
| Typical thermal resistance (Note 1)   | $R\theta_{JA}$ | 20          |             |             |             |             |             |             |             |             | $^\circ\text{C}/\text{W}$ |
| Maximum DC blocking voltage temperature   | $T_A$          | 125         |             |             |             |             |             |             |             |             | $^\circ\text{C}$          |
| Operating junction and storage temperature range  | $T_J, T_{STG}$ | -50 to +150 |             |             |             |             |             |             |             |             | $^\circ\text{C}$          |

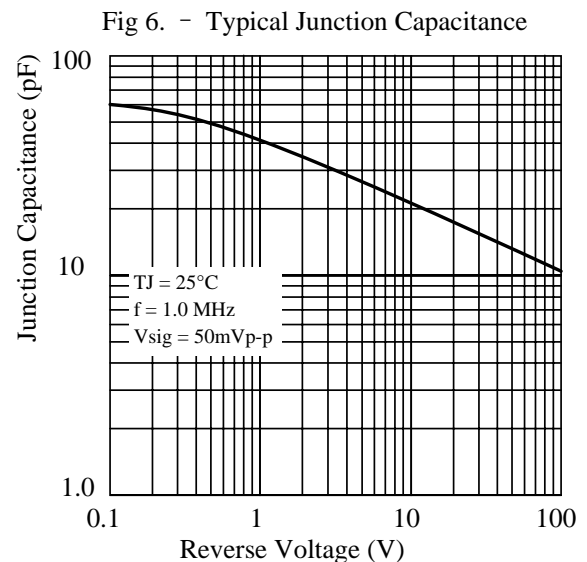
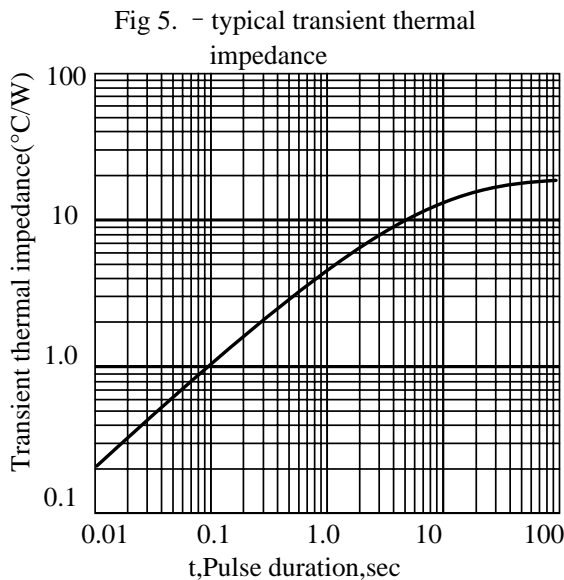
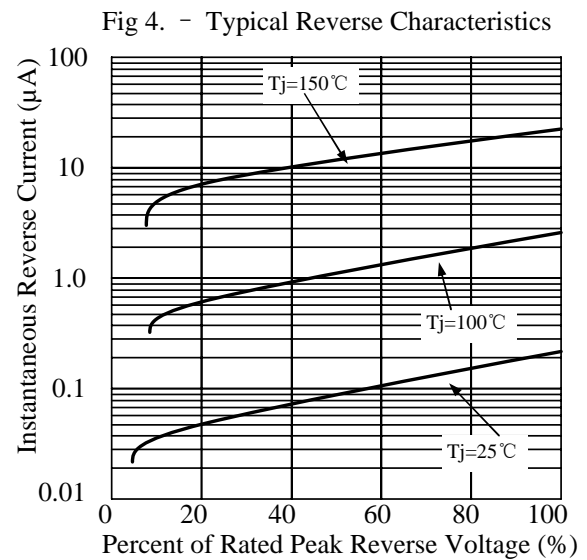
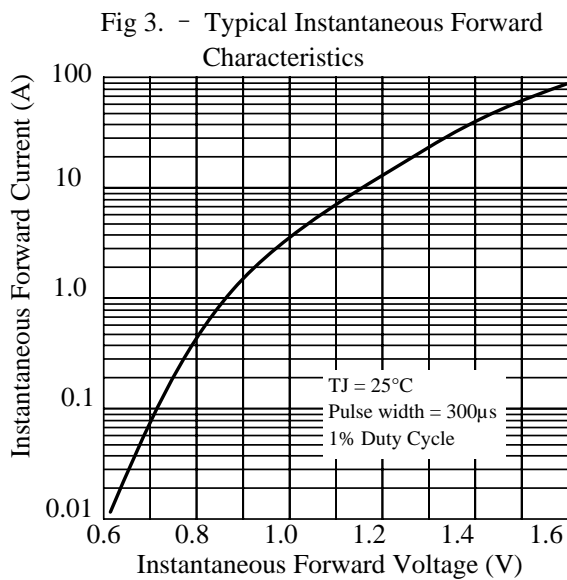
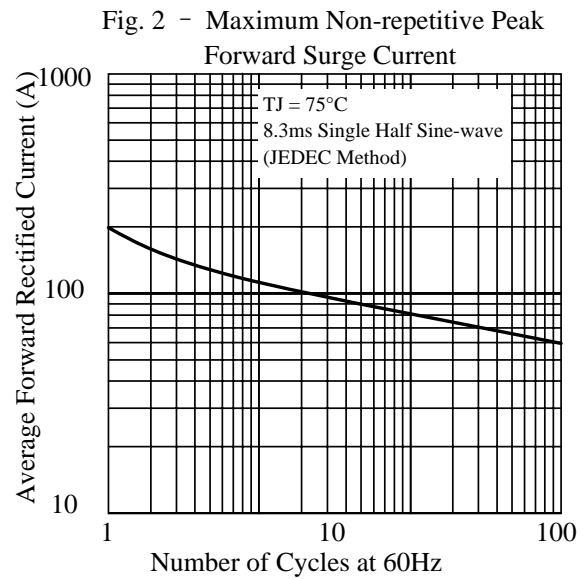
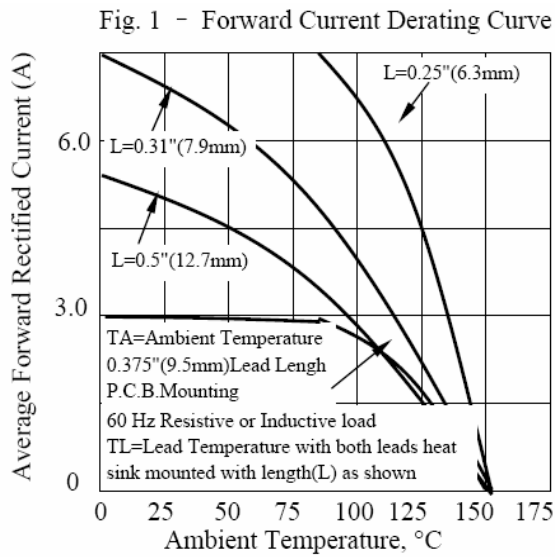
### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol  | symbol | 1N54<br>00G | 1N54<br>01G | 1N54<br>02G | 1N54<br>03G | 1N54<br>04G | 1N54<br>05G | 1N54<br>06G | 1N54<br>07G | 1N54<br>08G | Unit          |
|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Maximum instantaneous forward voltage at 3.0A   | $V_F$  | 1.10        |             |             |             |             |             |             |             |             | V             |
| Maximum DC reverse current $T_A = 25^\circ\text{C}$<br>at rated DC blocking voltage $T_A = 125^\circ\text{C}$ | $I_R$  | 10<br>200   |             |             |             |             |             |             |             |             | $\mu\text{A}$ |
| Typical junction capacitance at 4.0V, 1MHz  | $C_J$  | 30          |             |             |             |             |             |             |             |             | PF            |

### NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

### Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)



**Package Dimensions in inches and (millimeters)**
