## **Standard Diode**



### RoHS Compliant



#### Features:

- · Glass passivated chip junction
- · High efficiency, Low VF
- High current capability
- · High reliability
- · High surge current capability
- Low power loss

### **Specifications:**

#### **Mechanical Data:**

Cases : Moulded plastic

Lead : Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed

Polarity : Colour band denotes cathode

High temperature soldering guaranteed : 260°C/10 seconds/0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension

Weight : 1.2g

### **Maximum Ratings and Electrical Characteristics:**

Rating 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            | 1N5402G | 1N5406G | 1N5408G | Units |
|---|-------------------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 200     | 600     | 1,000   |       |
| Maximum RMS Voltage   | V <sub>RMS</sub>  | 140     | 420     | 700     | V     |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>   | 200     | 600     | 1,000   |       |
| Maximum Average Forward Rectified Current 0.375 inch (9.5mm) Lead Length at T <sub>A</sub> = 60°C       | I <sub>(AV)</sub> | 3       |         |         | А     |
| Peak Forward Surge Current, 8.3ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC method) | I <sub>FSM</sub>  | 125     |         |         |       |
| Maximum Instantaneous Forward Voltage at 3.0A   | V <sub>F</sub>    | 1       |         |         | V     |





# **Standard Diode**

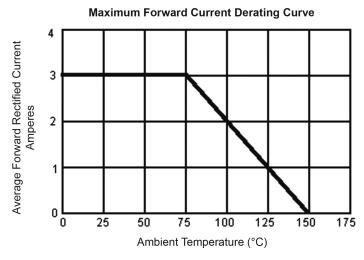


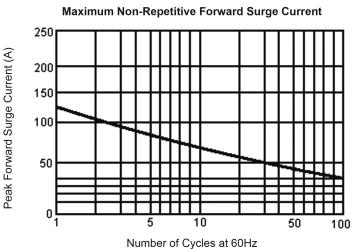
| Type Number  | Symbol                            | 1N5402G     | 1N5406G | 1N5408G  | Units |
|--|-----------------------------------|-------------|---------|----------|-------|
| Maximum DC Reverse Current at $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage at $T_A = 125^{\circ}C$ | I <sub>R</sub>                    | 5<br>100    |         | μA<br>μA |       |
| Typical Junction Capacitance ( Note 1 )  | C <sub>j</sub>                    | 25          |         |          | pF    |
| Typical Thermal Resistance ( Note 2 )  | $R_{\theta JA}$                   | 45          |         |          | °C/W  |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | -65 to +150 |         |          | °C    |

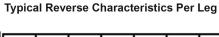
Notes 1: Measured at 1MHz and Applied Reverse Voltage of 4V DC.

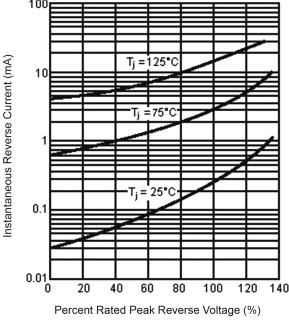
Notes 2: Mount on Cu-Pad Size 16mm × 16mm on PCB.

### Ratings and Characteristic Curves (1N5402G, 1N5406G and 1N5408G)







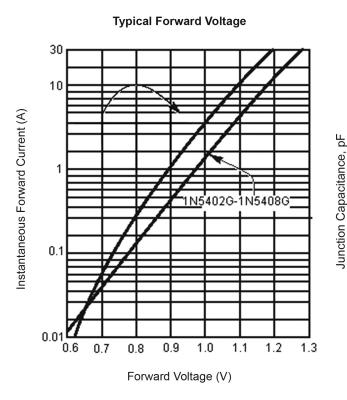


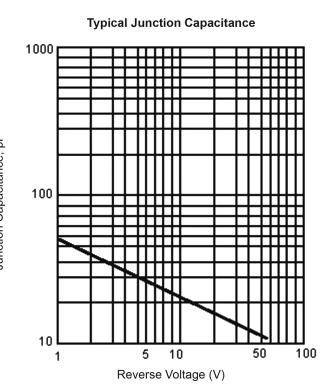
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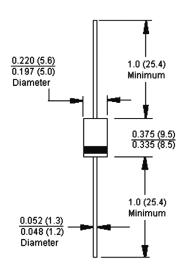
# **Standard Diode**







### **DO-201AD**



Dimensions: Inches (Millimetres)

#### **Part Number Table**

| Description                 | Part Number |  |  |  |
|-----------------------------|-------------|--|--|--|
| Diode, Standard, 3A, 200V   | 1N5402G     |  |  |  |
| Diode, Standard, 3A, 600V   | 1N5406G     |  |  |  |
| Diode, Standard, 3A, 1,000V | 1N5408G     |  |  |  |

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