

# 1N5400G THRU 1N5408G

## 3.0A Axial Leaded General Purpose Rectifiers - 50V-1000V

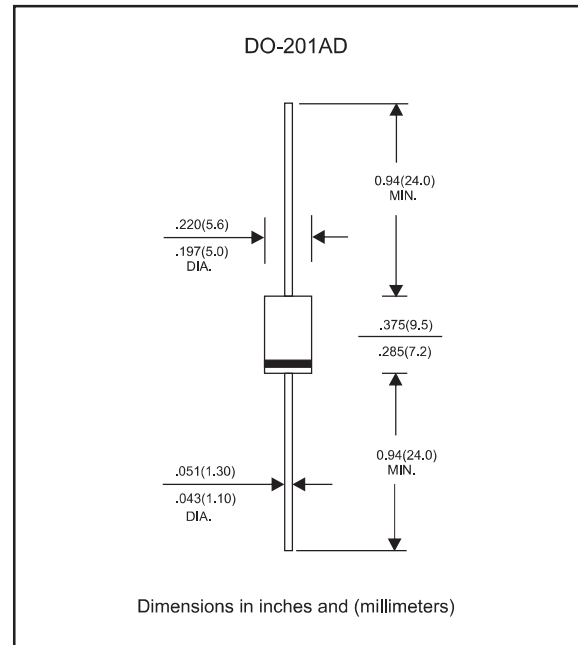
### Features

- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivation junction chip inside.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" indicates Halogen-free parts, ex. 1N5400G-H.

### Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, DO-201AD
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position : Any

### Package outline



### Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

| PARAMETER                  | CONDITIONS                                    | Symbol          | MIN. | TYP. | MAX. | UNIT               |
|----------------------------|-----------------------------------------------|-----------------|------|------|------|--------------------|
| Forward rectified current  | See Fig.2                                     | $I_o$           |      |      | 3.0  | A                  |
| Forward surge current      | 8.3ms single half sine-wave (JEDEC methode)   | $I_{FSM}$       |      |      | 125  | A                  |
| Reverse current            | $V_R = V_{RRM} \quad T_J = 25^\circ\text{C}$  | $I_R$           |      |      | 5.0  | $\mu\text{A}$      |
|                            | $V_R = V_{RRM} \quad T_J = 125^\circ\text{C}$ |                 |      |      | 50   |                    |
| Thermal resistance         | Junction to ambient                           | $R_{\theta JA}$ |      | 30   |      | $^\circ\text{C/W}$ |
| Diode junction capacitance | f=1MHz and applied 4V DC reverse voltage      | $C_J$           |      | 40   |      | pF                 |
| Storage temperature        |                                               | $T_{STG}$       | -65  |      | +175 | $^\circ\text{C}$   |

| SYMBOLS | $V_{RRM}^{*1}$<br>(V) | $V_{RMS}^{*2}$<br>(V) | $V_R^{*3}$<br>(V) | $V_F^{*4}$<br>(V) | Operating temperature<br>$T_J, (^\circ\text{C})$ |
|---------|-----------------------|-----------------------|-------------------|-------------------|--------------------------------------------------|
| 1N5400G | 50                    | 35                    | 50                | 1.10              | -55 to +150                                      |
| 1N5401G | 100                   | 70                    | 100               |                   |                                                  |
| 1N5402G | 200                   | 140                   | 200               |                   |                                                  |
| 1N5404G | 400                   | 280                   | 400               |                   |                                                  |
| 1N5406G | 600                   | 420                   | 600               |                   |                                                  |
| 1N5407G | 800                   | 560                   | 800               |                   |                                                  |
| 1N5408G | 1000                  | 700                   | 1000              |                   |                                                  |

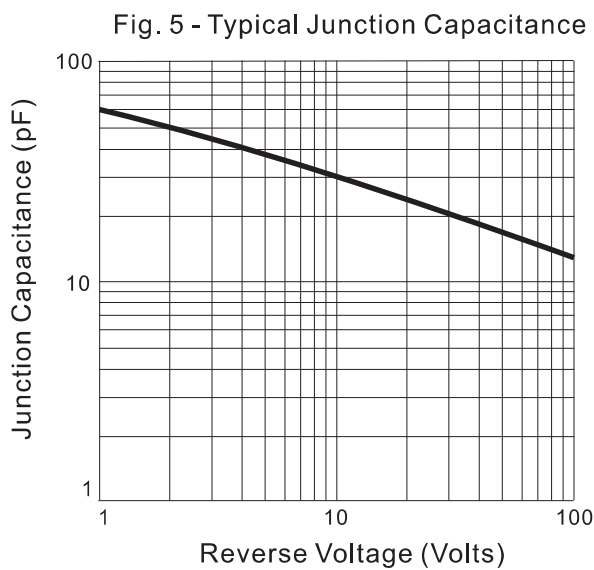
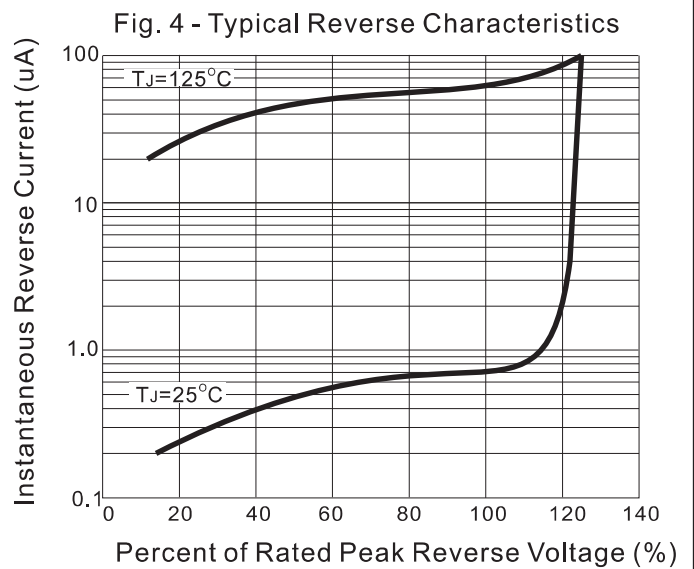
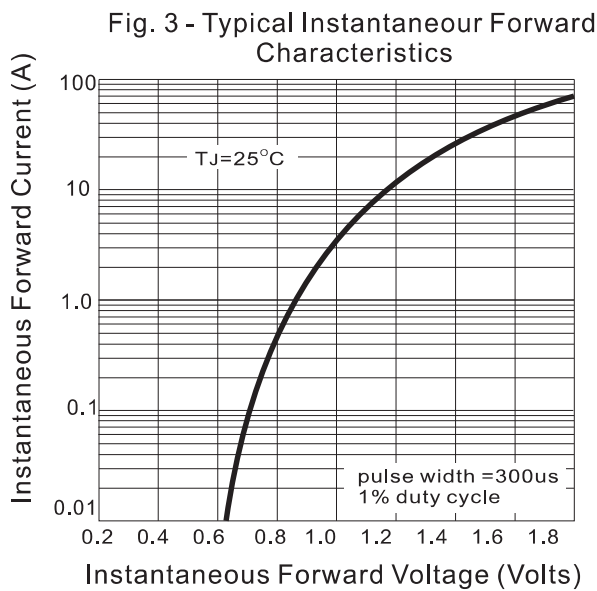
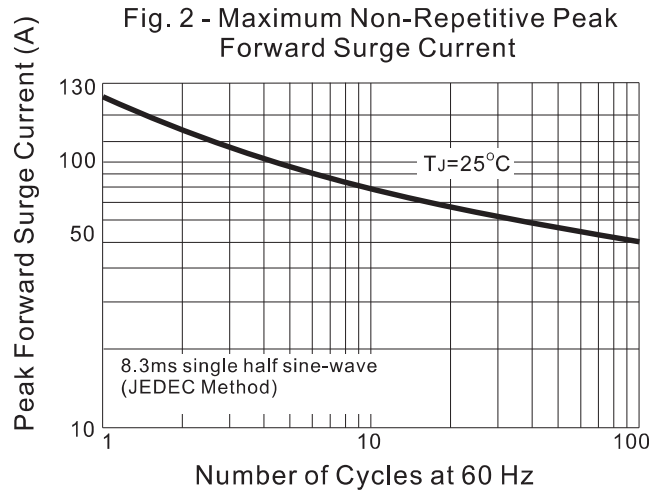
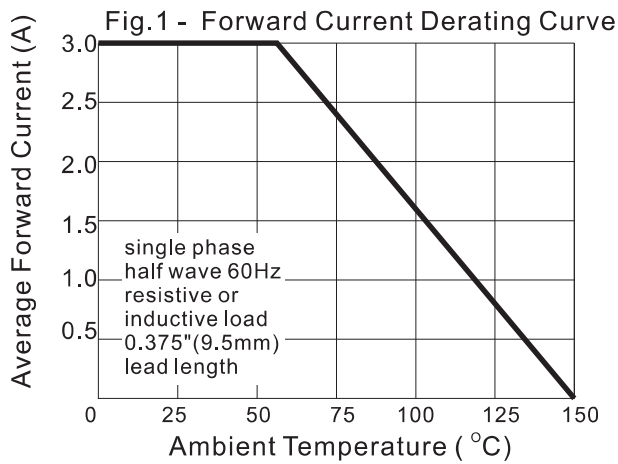
\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F=3.0\text{A}$

## Rating and characteristic curves (1N5400G THRU 1N5408G)

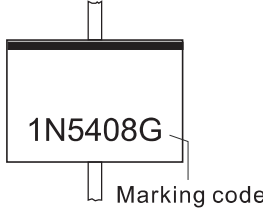
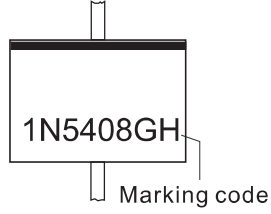


# 1N5400G THRU 1N5408G

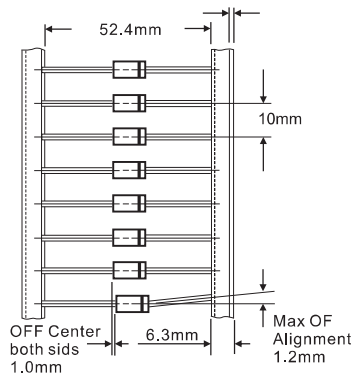
## Pinning information

| Pin                        | Simplified outline                                                                 | Symbol                                                                              |
|----------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Pin1 cathode<br>Pin2 anode |  |  |

## Marking

| Type number | Marking code | Example                                                                             |                                                                                      |
|-------------|--------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1N5400G     | 1N5400G      | For Halogen Device                                                                  | For Halogen-free Device                                                              |
| 1N5401G     | 1N5401G      |  |  |
| 1N5402G     | 1N5402G      |                                                                                     |                                                                                      |
| 1N5404G     | 1N5404G      |                                                                                     |                                                                                      |
| 1N5406G     | 1N5406G      |                                                                                     |                                                                                      |
| 1N5407G     | 1N5407G      |                                                                                     |                                                                                      |
| 1N5408G     | 1N5408G      |                                                                                     |                                                                                      |

## Taping specifications for AXIAL devices



## AMMO PACKING

| DEVICE CASE TYPE | Q'TY 1 (PCS / BOX) | INNER BOX SIZE (m/m) | CARTON SIZE (m/m) | Q'TY 2 (PCS / CARTON) | APPROX. CROSS WEIGHT(kg) |
|------------------|--------------------|----------------------|-------------------|-----------------------|--------------------------|
| DO-201AD         | 1,250              | 252 * 78 * 150       | 405 * 270 * 320   | 12,500                | 14.0                     |