

## 1.0A Leaded Type Glass Purpose Rectifiers - 50V-1000V

### Package outline

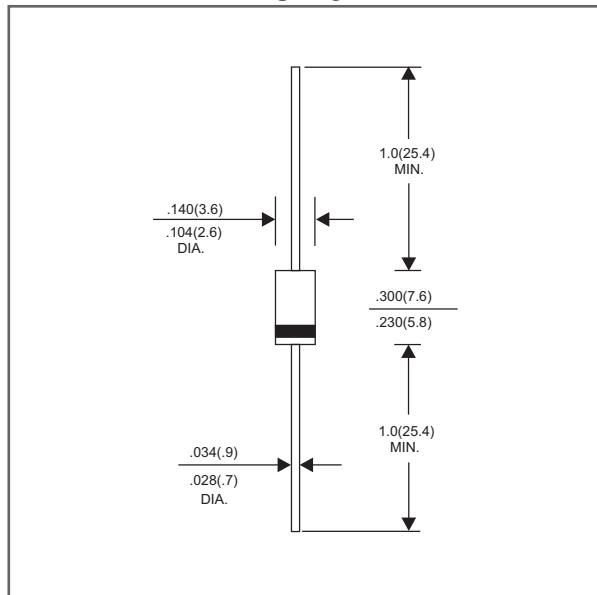
**DO-15**

### Features

- Axial lead type devices for through hole design.
- High current capability.
- High surge capability.
- Glass passivated chip junction inside.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Suffix "-H" indicates Halogen-free parts, ex. 1N5391G-H.

### Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, DO-15
- Lead: Axial leads, solderable per MIL-STD-202,  
Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position : Any
- Weight : Approximated 0.40 gram



Dimensions in inches and (millimeters)

### Maximum ratings (AT T =25°C unless otherwise noted)

| PARAMETER                  | CONDITIONS  | Symbol           | MIN. | TYP. | MAX. | UNIT |
|----------------------------|---|------------------|------|------|------|------|
| Forward rectified current  | See Fig.1   | I <sub>o</sub>   |      |      | 1.5  | A    |
| Forward surge current      | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | I <sub>FSM</sub> |      |      | 50   | A    |
| Reverse current            | V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 25°C               | I <sub>R</sub>   |      |      | 5.0  | μA   |
|                            | V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 100°C              |                  |      |      | 50   |      |
| Thermal resistance         | Junction to ambient   | R <sub>θJA</sub> |      | 50   |      | °C/W |
| Diode junction capacitance | f=1MHz and applied 4V DC reverse voltage                              | C <sub>J</sub>   |      | 20   |      | pF   |
| Storage temperature        |   | T <sub>STG</sub> | -65  |      | +175 | °C   |

| SYMBOLS | V <sub>RRM</sub><br>*1<br>(V) | V <sub>RMS</sub><br>*2<br>(V) | V <sub>R</sub><br>*3<br>(V) | V <sub>F</sub><br>*4<br>(V) | Operating<br>temperature<br>T <sub>J</sub> , (°C) |
|---------|-------------------------------|-------------------------------|-----------------------------|-----------------------------|---|
| 1N5391G | 50                            | 35                            | 50                          |                             |   |
| 1N5392G | 100                           | 70                            | 100                         |                             |   |
| 1N5393G | 200                           | 140                           | 200                         |                             |   |
| 1N5395G | 400                           | 280                           | 400                         |                             |   |
| 1N5397G | 600                           | 420                           | 600                         |                             |   |
| 1N5398G | 800                           | 560                           | 800                         |                             |   |
| 1N5399G | 1000                          | 700                           | 1000                        |                             |   |

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@I<sub>F</sub>=1.5A

### Rating and characteristic curves

