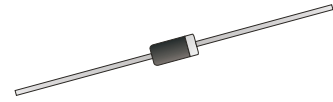


1N4148-G

Voltage: 100V
Current: 0.15A
RoHS Device

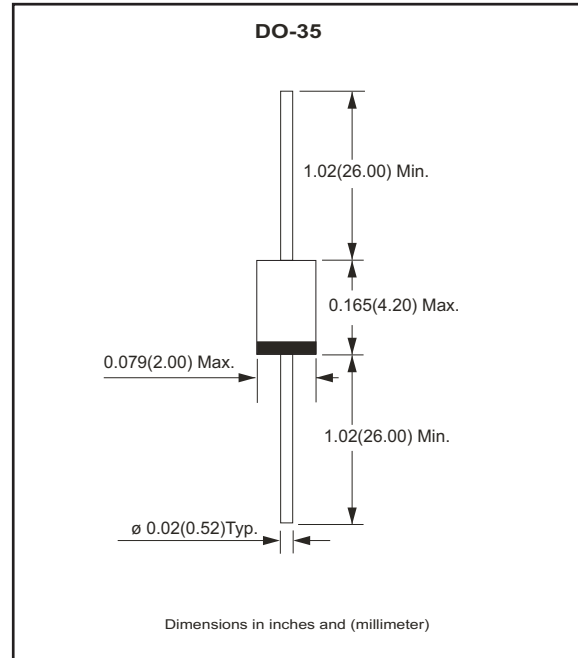


Features

- Surge overload ratings to 2 amperes peak.
- Ideal for printed circuit board.

Mechanical data

- Case: Glass, DO-35
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Terminal: Pure tin plated lead free.
- Polarity: Indicated by cathode band.
- Mounting Position: Any
- Weight: 0.13gram



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%.

| Parameter | Symbol | Value | Unit |
|---|-----------------|-------------|------|
| Maximum Repetitive Peak Voltage | V_{RRM} | 100 | V |
| Maximum RMS Voltage | V_{RMS} | 75 | V |
| Forward Repetitive Peak Current | I_{FSM} | 500 | mA |
| Maximum Average Forward Current | $I_{F(AV)}$ | 150 | mA |
| Peak Forward Surge Current $t_p=1\mu S$ | I_{FSN} | 2.0 | A |
| Typical Resistance Junction to Ambient Air (Note 1) | $R_{\theta JA}$ | 350 | K/W |
| Operating and Storage Temperature Rang | T_J, T_{STG} | -65 to +200 | °C |

| Parameter | Symbol | Min | Typ. | Max | Unit |
|--|----------|-----|------|-----|------|
| Forward Voltage at $I_F = 10\text{ mA}$ | V_F | - | - | 1 | V |
| Leakage Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}, T_J = 150^\circ\text{C}$ | I_R | - | - | 25 | nA |
| | I_R | - | - | 5 | uA |
| | I_R | - | - | 50 | uA |
| Reverse Recovery Time(Note 2) | T_{rr} | - | - | 4. | ns |

NTOES: (1) Thermal Resistance Junction to Ambient Air.

(2) Reverse Recovery Test Conditions: $I_F=10\text{mA}, V_R=6\text{V}, I_{rr}=0.1 \times I_R, R_L=100\Omega$.

RATING AND CHARACTERISTIC CURVES (1N4148-G)

Fig.1 - Maximum Forward Current Derating Curve

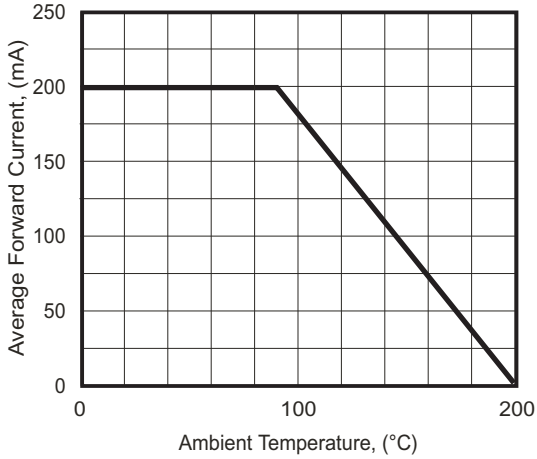


Fig.2 - Maximum Non-Repetitive Forward Surge Current Per Bridge Element

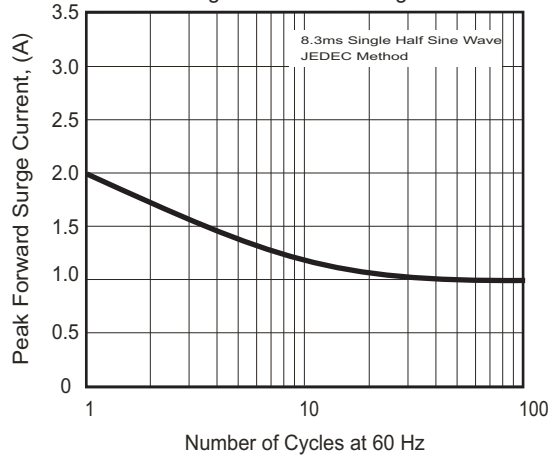


Fig.3 - Typical Instantaneous Forward Characteristics Per Bridge Element

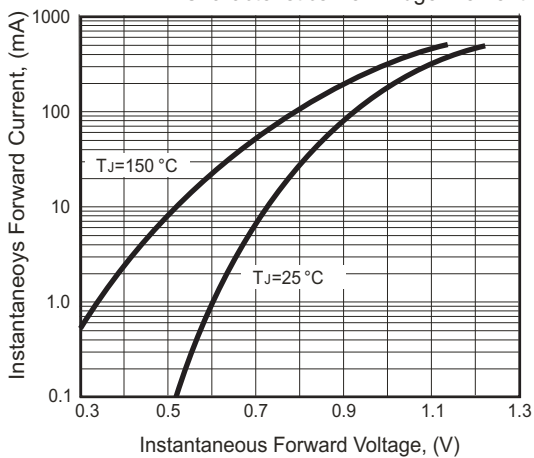


Fig.4 - Typical Reverse Characteristics Per Bridge Element

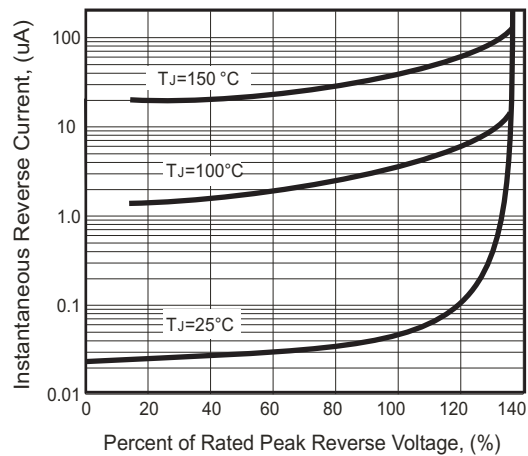
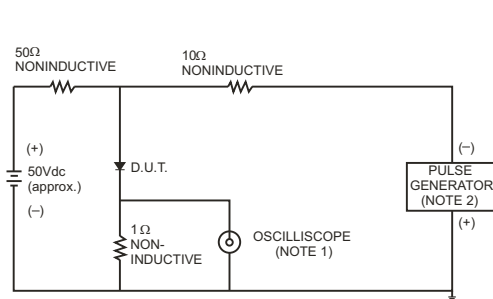
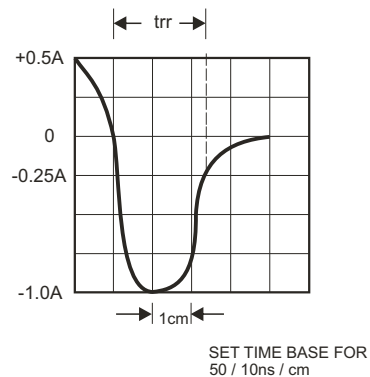


Fig.5 - Reverse Recover Time Characteristics and Test Circuit Diagram

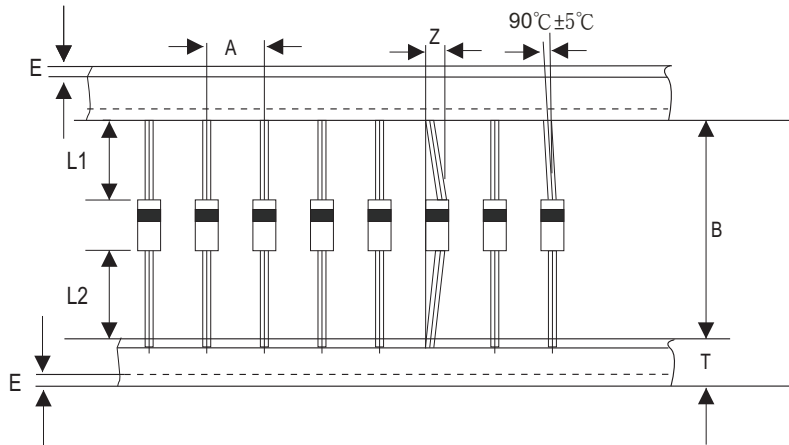


NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22pF.
2. Rise Time = 10ns max. Source Impedance = 50 ohms.



SET TIME BASE FOR 50 / 10ns / cm

Taping Specification For Axial Lead Diodes



| DO-35 | SYMBOL | A | B | Z | T | E | L1-L2 | |
|-------|--------|---------------|---------------|-------------|---------------|-------------|-------------|--|
| | (mm) | 5.00 ± 0.5 | 52.0 ± 1.5 | 1.2 (max) | 6.0 ± 0.4 | 0.8 (max) | 1.0 (max) | |
| | (inch) | 0.197 ± 0.020 | 2.047 ± 0.020 | 0.047 (max) | 0.236 ± 0.016 | 0.032 (max) | 0.040 (max) | |

Marking Code

| Part Number | Marking Code |
|-------------|--------------|
| 1N4148-G | 1N4148 |



Standard Packaging

| Case Type | AMMO PACK | |
|-----------|-------------|----------------|
| | BOX (pcs) | CARTON (pcs) |
| DO-35 | 5,000 | 100,000 |