

**Features**

- Low Leakage Current Applications
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings**

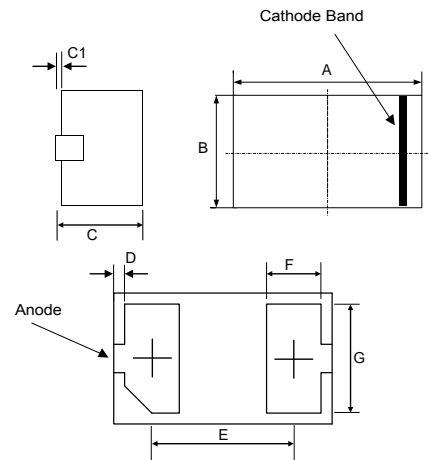
- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 1250°C/W Junction to Ambient

| MCC Part Number | Device Marking |
|-----------------|----------------|
| 1N4148WL2       | T4             |

| Parameter                         | Symbol       | Value |
|-----------------------------------|--------------|-------|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$    | 100V  |
| Working Peak Reverse Voltage      | $V_{RWM}$    | 100V  |
| RMS Reverse Voltage               | $V_{R(RMS)}$ | 71V   |
| Average Rectified Output Current  | $I_O$        | 150mA |
| Peak Forward Surge Current(t=1μs) | $I_{FSM}$    | 4A    |
| Power Dissipation                 | $P_D$        | 100mW |

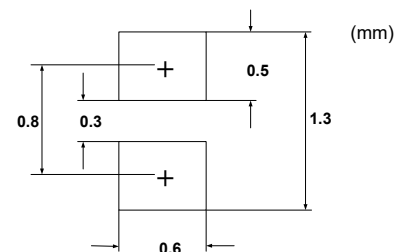
**150mA, 100V Switching Diode**

**DFN1006-2L**



| DIM | DIMENSIONS |       |      |      | NOTE |
|-----|------------|-------|------|------|------|
|     | INCHES     |       | MM   |      |      |
|     | MIN        | MAX   | MIN  | MAX  |      |
| A   | 0.037      | 0.041 | 0.95 | 1.05 |      |
| B   | 0.022      | 0.026 | 0.55 | 0.65 |      |
| C   | 0.016      | 0.020 | 0.40 | 0.50 |      |
| C1  | ----       | 0.002 | ---- | 0.05 |      |
| D   | 0.001      | 0.003 | 0.02 | 0.08 |      |
| E   | 0.026      |       | 0.65 |      | TYP. |
| F   | 0.008      | 0.012 | 0.20 | 0.30 |      |
| G   | 0.018      | 0.022 | 0.45 | 0.55 |      |

**Suggested Solder Pad Layout**



**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

| Parameter             | Symbol   | Conditions  | Min. | Typ. | Max.  | Units         |
|-----------------------|----------|---|------|------|-------|---------------|
| Forward Voltage       | $V_F$    | $I_F=1\text{mA}$  |      |      | 0.715 | V             |
|                       |          | $I_F=10\text{mA}$   |      |      | 0.855 | V             |
|                       |          | $I_F=50\text{mA}$   |      |      | 1     | V             |
|                       |          | $I_F=150\text{mA}$  |      |      | 1.25  | V             |
| Reverse Current       | $I_R$    | $V_R=25\text{V}, T_J=25^\circ\text{C}$                          |      |      | 25    | nA            |
|                       |          | $V_R=25\text{V}, T_J=150^\circ\text{C}$                         |      |      | 30    | $\mu\text{A}$ |
|                       |          | $V_R=75\text{V}, T_J=25^\circ\text{C}$                          |      |      | 5     | $\mu\text{A}$ |
| Junction Capacitance  | $C_J$    | $V_R = 0\text{V}, f = 1\text{MHz}$                              |      |      | 1.5   | pF            |
| Reverse Recovery Time | $t_{rr}$ | $I_F=I_R=10\text{mA},$<br>$I_{rr}=0.1 \cdot I_R, R_L=100\Omega$ |      |      | 4     | ns            |

\* Pulse Test: Pulse Width 300  $\mu\text{sec}$ , Duty Cycle 2%

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

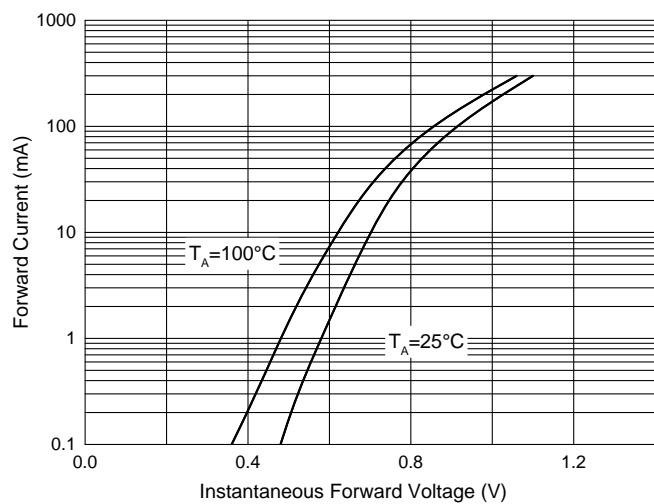


Fig. 2 - Typical Reverse Leakage Characteristics

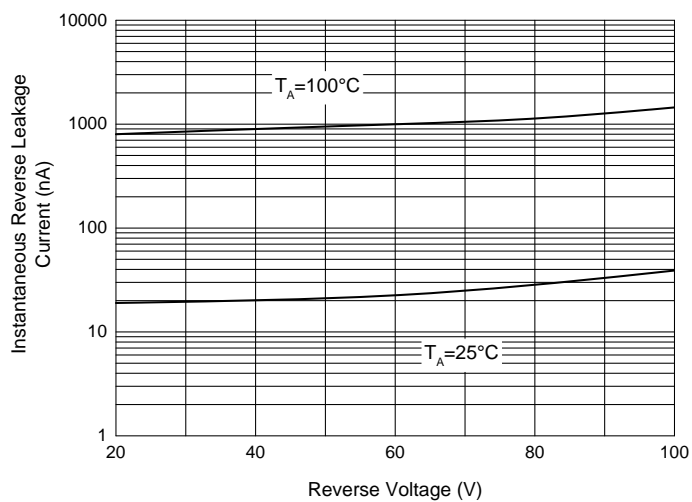
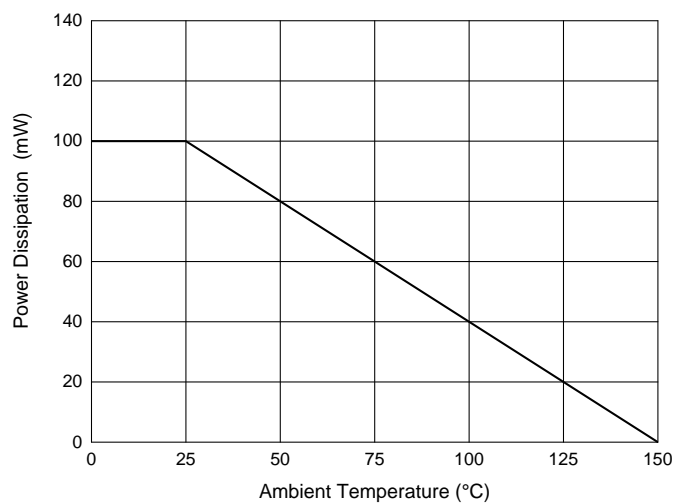


Fig. 3 - Power Derating Curve



## Ordering Information

| Device         | Packing                |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 10Kpcs/Reel |

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
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