

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)

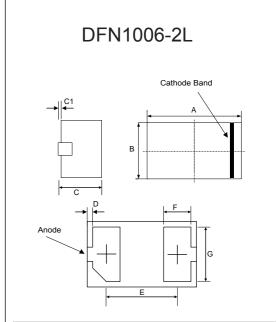
Maximum Ratings

- 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 | | |

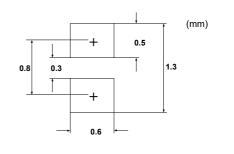
| Parameter | Symbol | Value |
|-----------------------------------|---------------------|-------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 100V |
| Working Peak Reverse Voltage | V_{RWM} | 100V |
| RMS Reverse Voltage | V _{R(RMS)} | 71V |
| Average Rectified Output Current | Io | 150mA |
| Peak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

150mA,100V Switching Diode



| DIMENSIONS | | | | | |
|------------|-------|-------|------|------|------|
| DIM INCHES | | MM | | NOTE | |
| DIIVI | MIN | MAX | MIN | MAX | NOTE |
| Α | 0.037 | 0.041 | 0.95 | 1.05 | |
| В | 0.022 | 0.026 | 0.55 | 0.65 | |
| С | 0.016 | 0.020 | 0.40 | 0.50 | |
| C1 | | 0.002 | | 0.05 | |
| D | 0.001 | 0.003 | 0.02 | 0.08 | |
| Е | 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





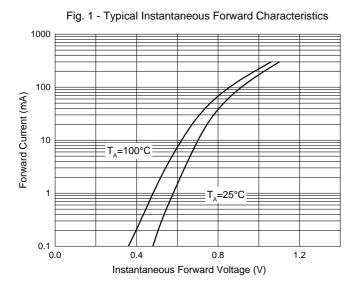
Electrical Characteristics @ 25°C (Unless Otherwise Specified)

| Parameter | Symbol | Conditions | Min. | Тур. | Max. | Units |
|--------------------------------|---|---|------|------|-------|-------|
| Forward Voltage V _F | V | I _F =1mA | | | 0.715 | V |
| | | I _F =10mA | | | 0.855 | V |
| | I _F =50mA | | | 1 | V | |
| | | I _F =150mA | | | 1.25 | V |
| | V _R =25V, T _J =25°C | | | 25 | nA | |
| Reverse Current | I _R | V _R =25V, T _J =150°C | | | 30 | μΑ |
| | V _R =75V, T _J =25°C | | | 5 | μΑ | |
| Junction Capacitance | CJ | $V_R = 0V$, $f = 1MHz$ | | | 1.5 | pF |
| Reverse Recovery Time | t _{rr} | $I_F = I_R = 10 \text{mA},$ $I_{rr} = 0.1 ^*I_R, R_L = 100 \Omega$ | | | 4 | ns |

 $^{^{\}star}$ Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%



Curve Characteristics



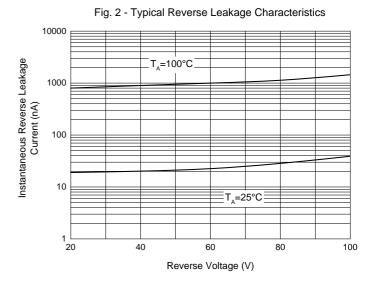


Fig. 3 - Power Derating Curve

140
120
100
40
20
0 25 50 75 100 125 150

Ambient Temperature (°C)



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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