

#### **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)

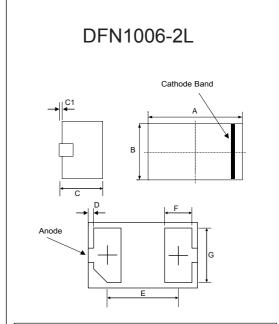
## **Maximum Ratings**

- 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	

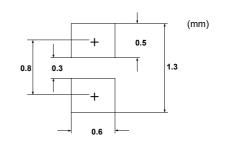
Parameter	Symbol	Value
Peak Repetitive Reverse Voltage	$V_{RRM}$	100V
Working Peak Reverse Voltage	$V_{RWM}$	100V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	71V
Average Rectified Output Current	Io	150mA
Peak Forward Surge Current(t=1µs)	I <sub>FSM</sub>	4A
Power Dissipation	P <sub>D</sub>	100mW

# 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





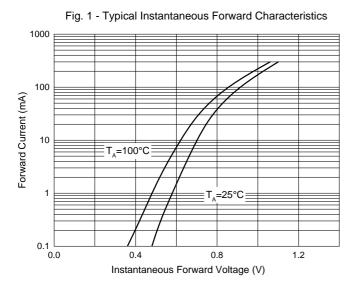
# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

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

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



#### **Curve Characteristics**



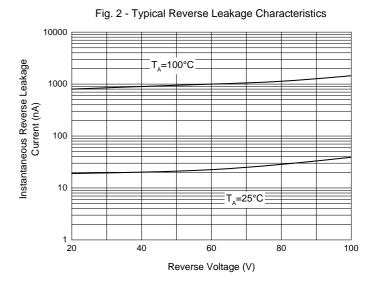


Fig. 3 - Power Derating Curve

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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