Discription

The PESD1IVN24-LS protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events.

Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



DFN1006-2L
(SOD-882)



Circuit Diagram

Features

- ★ Small Body Outline Dimensions: 1.00 mm x 0.60 mm
- ★ Low Body Height: 0.50 mm
- ★ Low Leakage
- ★ Response Time is Typically < 1 ns
- ★ ESD Rating of Class 3 per Human Body Model
- ★ IEC61000−4−2 Level 4 ESD Protection
- ★ We declare that the material of product compliance with RoHS requirements and Halogen Free.

Ordering Information

Product ID	Pack	Qty(PCS)
PESD1IVN24-LS	DFN1006-2L(SOD-882)	10000

Absolute Ratings (T_{amb}=25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20μs)	300	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±30 ±30	KV

Electrical Parameter (T_A = 25°C unless otherwise noted)

Device	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) * @ I_T = 1mA		I_{PP} (A)**	V_C (V) ** @ I_{PP} =5A	P_{PK} (W)**	C(pF) VR=0V, f=1MHz;
	Max	Max	Min	Max	Max	Max	Max	Typ
PESD1IVN24-LS	24	0.1	25	29.5	5	60	300	15

* V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

** Surge current waveform per Figure 1.

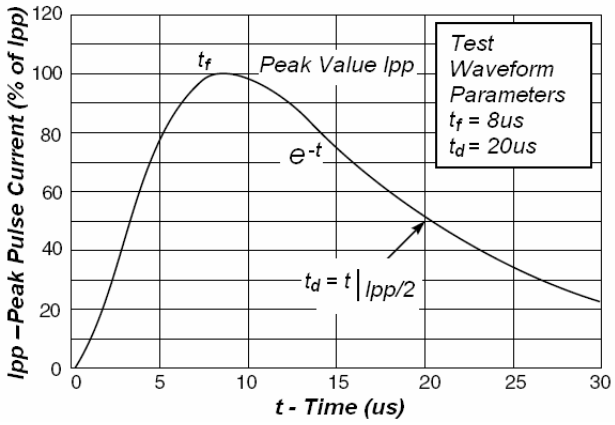


Fig1. Pulse Waveform

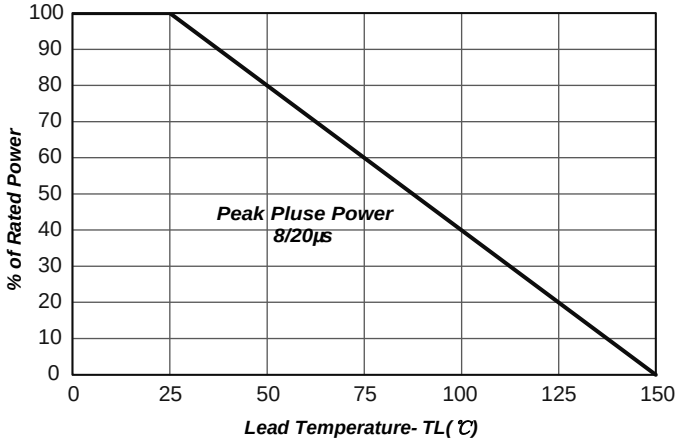


Fig2.Power Derating Curve

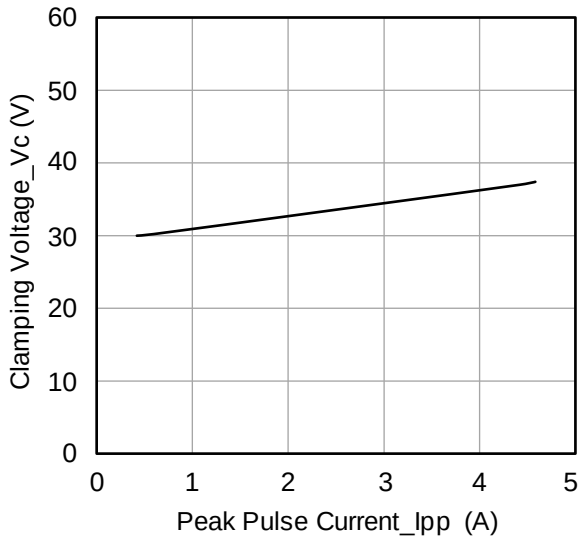


Fig 3. Clamping Voltage vs. Peak Pulse Current

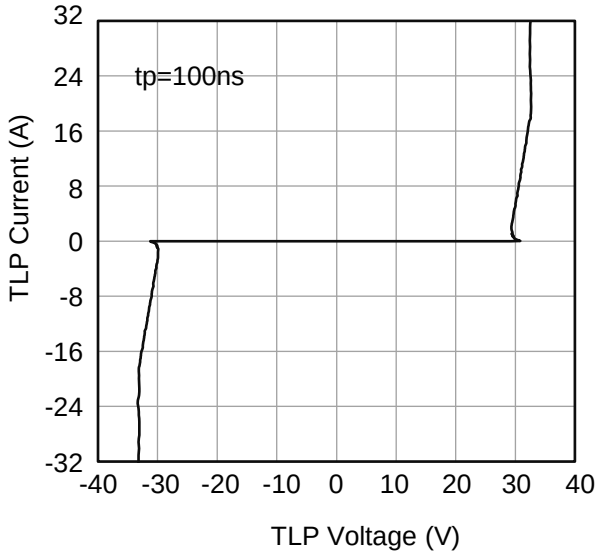
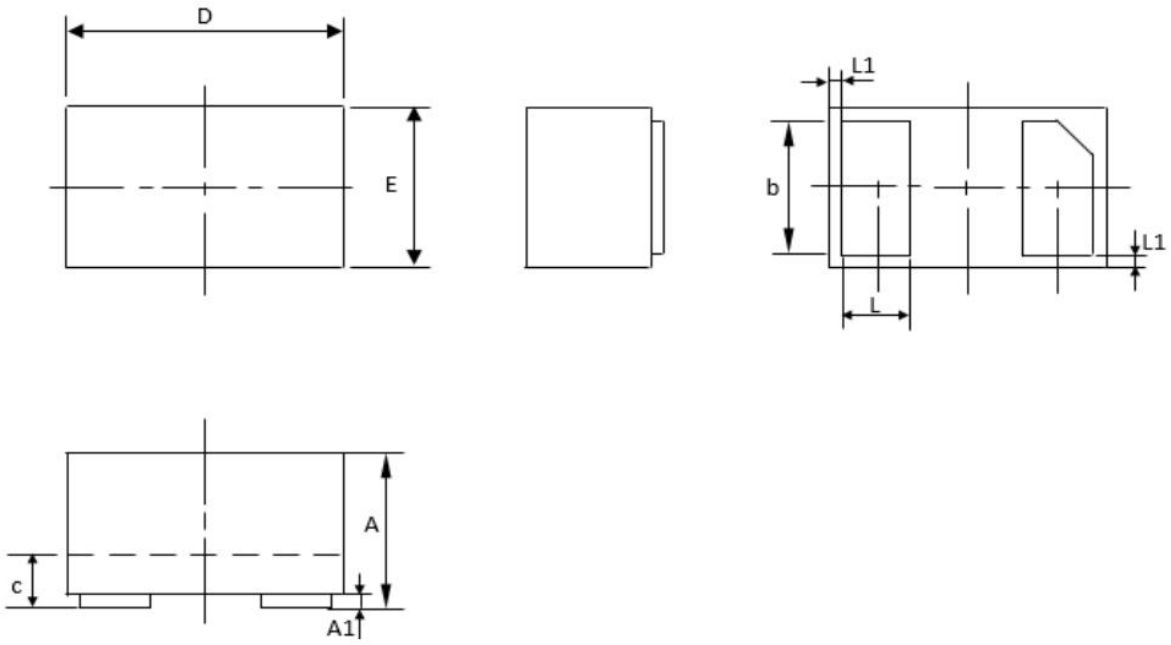


Fig 4.TLP Measurement

Outline And Dimensions



DFN1006-2L(SOD-882)			
Dim	Min	Typ.	Max
A	0.46	0.48	0.50
A1	0	0.02	0.05
b	0.45	0.5	0.55
c	0.1	0.12	0.14
D	0.95	1.00	1.05
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.035	0.05	0.065
h	0.07	0.12	0.17
All Dimensions in mm			

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