

Discription

The HESD5341N 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 unidirectional line in applications where arrays are not practical.



DFN1006-2L

Features

★ Transient protection for high-speed data lines IEC 61000-4-2(ESD) ±20kV (Contact) ±20kV (Air)

IEC 61000-4-4(EFT) 40A (5/50 ns)

Peak power dissipation: 60W (8/20us)

★ Working voltages: 5V

★ Ultra-small package (1.0mmx0.6mmx0.5mm)

★ Protects one data, control line

★ Low capacitance: 0.4pF (Typical)

★ Low clamping voltage

★ Low leakage current

1 0 0 2

Circuit Diagram

Orderingin formation

Product ID	Pack	Qty(PCS)
HESD5341N	DFN1006-2L	10000

Absolute Ratings(Tamb = 25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t _p = 8/20 μ s)	60	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	-55 to +150	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±20 ±20	KV
	IEC61000-4-4 (EFT)	40	Α

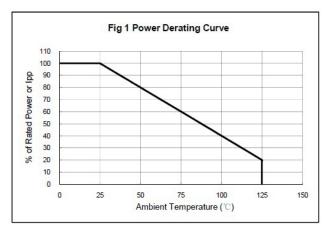


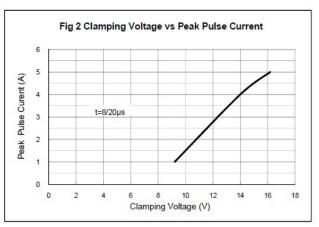
Electrical Characteristics Ratings at 25°C

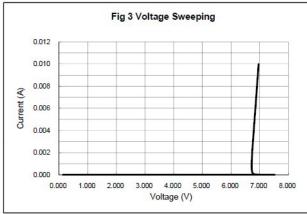
Symbol	Parameter	Test Condition	Min	Тур	Max	Units
V _{RWM}	Reverse Working Voltage				5.0	٧
V _{BR}	Reverse Breakdown Voltage	Iτ = 1mA	6.0			V
I _R	Reverse Leakage Current	V _{RWM} = 5V			100	nA
Vc	Clamping Voltage	$I_{RWM} = 1A, t_p = 8/20 \mu s$			10	V
Vc Clamping Voltage		$I_{\text{RWM}}=4A,t_{\text{p}}=8/20\mu\text{s}$			15	V
C¹	Junction Capacitance	$V_R = 0V$, $f = 1MHz$		0.60	0.80	pF

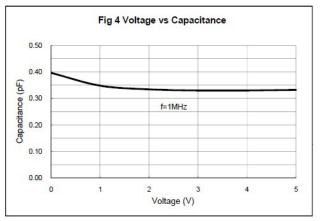


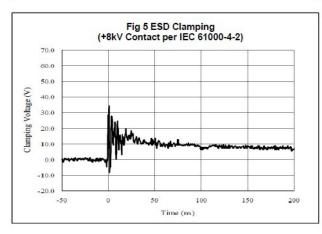
Typical Characteristics

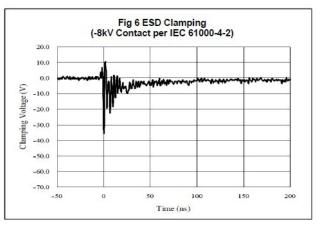




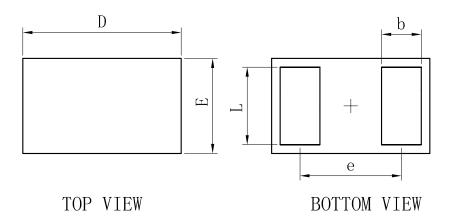




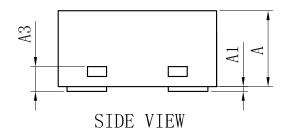




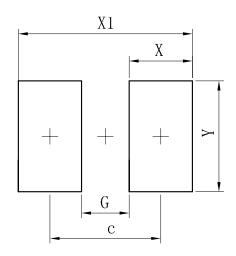
Outline And Dimensions



DFN1006-2L			
Dim	Min	Тур	Max
D	0. 95	1.00	1.05
Е	0. 55	0.60	0.65
е	-	0.64	ı
L	0.44	0.49	0. 54
b	0. 20	0. 25	0.30
A	0.43	0.48	0. 53
A1	0	. 1	0.05
A3	0. 127REF.		
All Dimensions in mm			



Soledering Footprint



Dimensions	(mm)
С	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70



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