

### Discription

The HESD5471X 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.

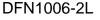
It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.

### Features

- ★ Small Body Outline Dimensions
- ★ Low Body Height
- ★ Peak Power up to 5 Watts @ 8 x 20 µ s Pulse
- ★ Low Leakage current
- ★ Response Time is Typically < 1 ns
- ★ ESD Rating of Class 3 per Human Body Model

## **Orderingin formation**





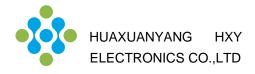


Circuit Diagram

Product ID	Pack	Qty(PCS)
HESD5471X	DFN1006-2L	10000

#### Absolute Ratings(Tamb = 25°C)

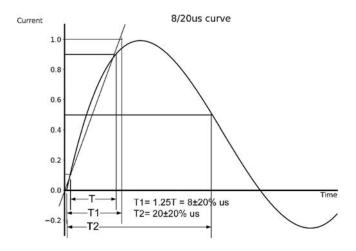
Symbol	Parameter		Value	Units
P <sub>PP</sub>	Peak Pulse Power ( $t_p = 8/20 \ \mu \ s$ )		3	W
TL	Maximum lead temperature for soldering during 10s		260	°C
T <sub>stg</sub>	Storage Temperature Range	-55 to +150	°C	
T <sub>op</sub>	Operating Temperature Range		-55 to +150	°C
Tj	Maximum junction temperature		150	°C
	IEC61000-4-2 (ESD) air dischar contact dischar	•	±25 ±25	KV
	IEC61000-4-4 (EFT)		40	А



# **Electrical Characteristics**

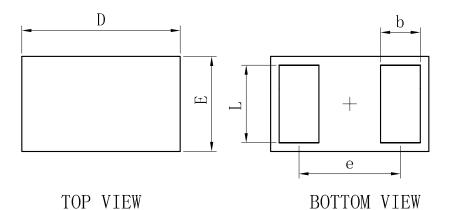
Symbol	Parameter	Test Condition	Min	Тур	Max	Units
Vrwm	Reverse Working Voltage				5.0	V
Vbr	Reverse Breakdown Voltage	l⊤ = 1mA	6.0			V
IR	Reverse Leakage Current	$V_{RWM} = 5.0V$			1.0	μA
Vc	Clamping Voltage	$I_{RWM} = 1A, t_{P} = 8/20 \mu s$		10		V
		I <sub>RWM</sub> = 4.5A, t <sub>P</sub> = 8/20μs		15		V
CJ	Junction Capacitance	$V_R = 0V, f = 1MHz$		0.38		pF

## **Typical Characteristics**

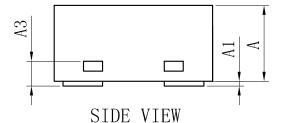




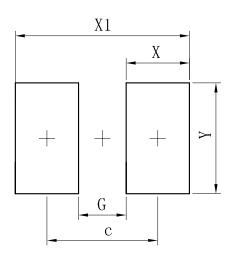
#### OUTLINE AND DIMENSIONS



DFN1006-2L Dim Min Тур Max 0.95 1.00 D 1.050.60 Е 0.550.65 0.64 — е 0.49 L 0.44 0.540.20 0.25 0.30 b A 0.43 0.48 0.53 0 0.05 A1 — 0.127REF. AЗ All Dimensions in mm



SOLDERING FOOTPRINT



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



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