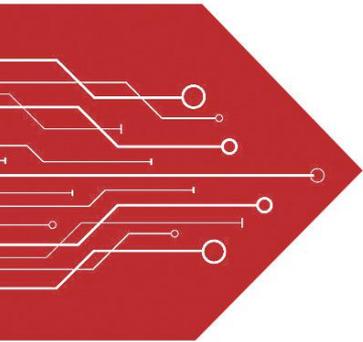
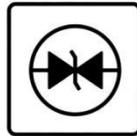


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SEMICONDUCTOR



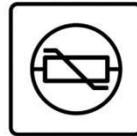
ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

Features

- Ultra Low Capacitance: 0.30pF(typ.)
- Reverse Working Voltage: 5V
- IEC 61000-4-2 (ESD Air): ±20kV
IEC 61000-4-2 (ESD Contact): ±20kV
IEC 61000-4-5 (Lightning 8/20µs): 5A

2. Pin Description



Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

4. Schematic Diagram



Order Information

Type	Package	Size (mm)	Delivery Form	Delivery Quantity
ESD5311N-MS	DFN1006-2L	1.00x0.60x0.37	7" T&R	10,000

Limiting Values($T_A = 25\text{ }^\circ\text{C}$, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
V_{ESD}	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±20	kV
		IEC 61000-4-2; Air Discharge	-	±20	kV
P_{PP}	Peak Pulse Power	$t_p = 8/20\ \mu\text{s}$	-	110	W
I_{PPM}	Rated Peak Pulse Current	$t_p = 8/20\ \mu\text{s}$	-	5.0	A
T_A	Operating Temperature Range	-	-55	125	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-	-55	150	$^\circ\text{C}$

Electrical Characteristics(T_A = 25 °C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
V _{RWM}	Reverse Working Voltage	T _A = 25 °C	-	-	5.0	V
V _{BR}	Breakdown Voltage	I _R = 1mA; T _A = 25 °C	6.0	8.5	9.5	V
I _R	Reverse Leakage Current	V _{RWM} = 5V; T _A = 25 °C	-	-	0.1	μA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs	-	-	10	V
		I _{PP} = 5.0A, t _p = 8/20μs	-	-	22	V
C _J	Junction Capacitance	V _R = 0V, f = 1 MHz	-	0.30	0.40	pF

Typical Characteristics

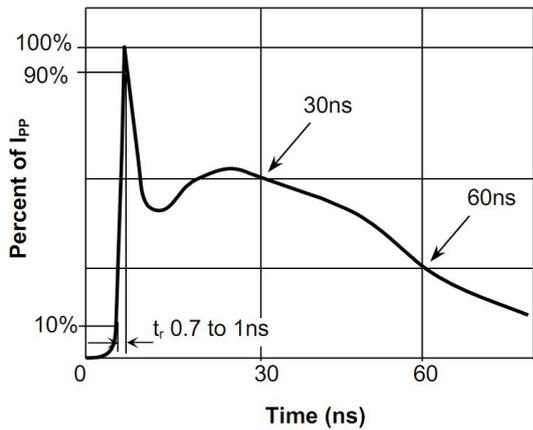


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

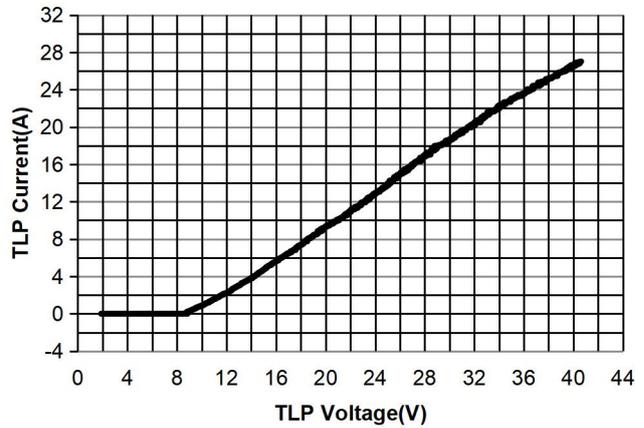


Fig.2 Transmission Line Pulse (TLP)

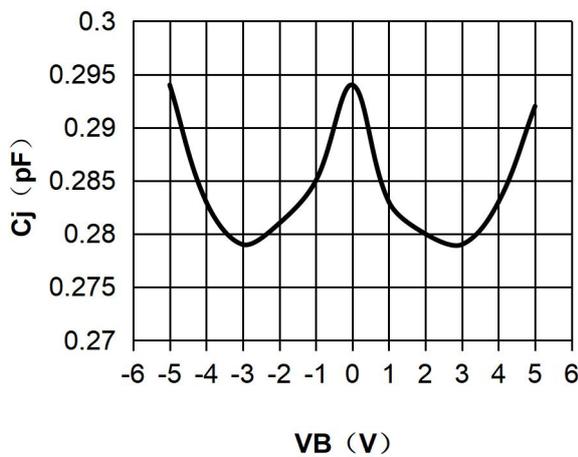


Fig.3 Capacitance vs. Reverses Voltage

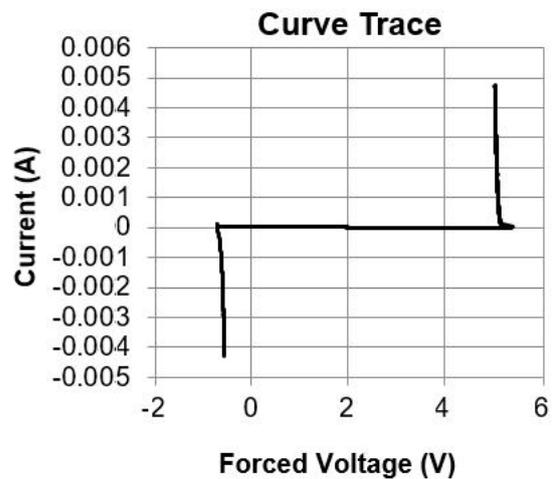
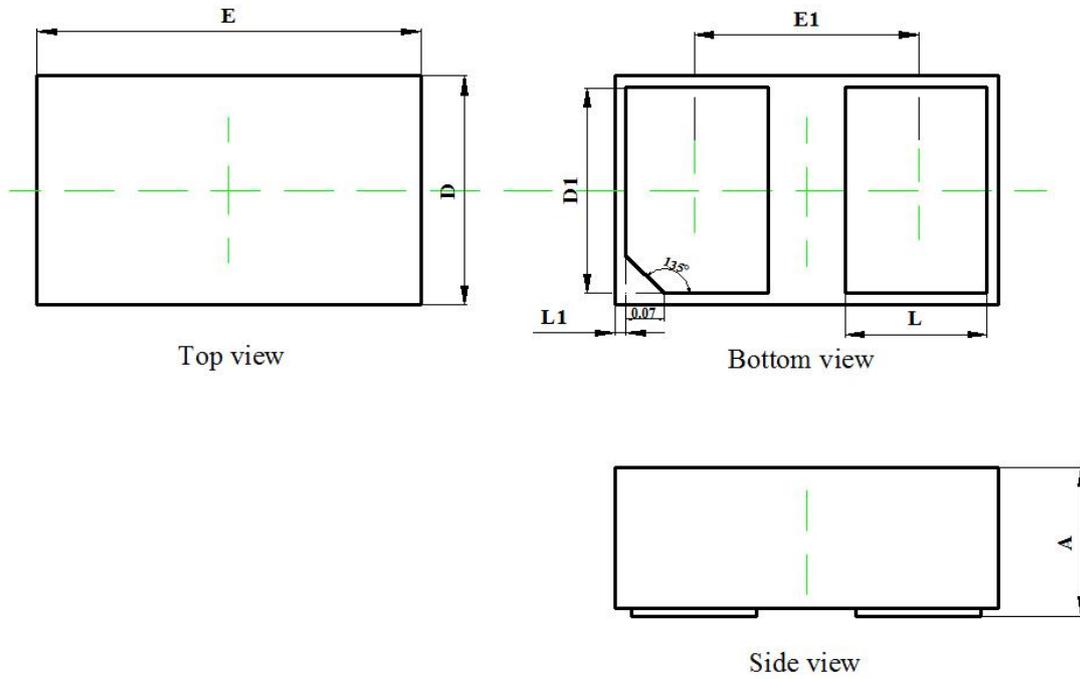


Fig.4 IV Curve

DFN1006-2L



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004

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