



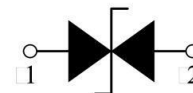
Transient Voltage Suppressors for ESD Protection

Low Capacitance**Features**

- ◆ Capacitance: 9pF(typ.)
- ◆ Reverse Working Voltage: 5V
- ◆ IEC61000-4-2(ESD Air): $\pm 25\text{kV}$
- ◆ IEC61000-4-2(ESD Contact): $\pm 25\text{kV}$
- ◆ IEC61000-4-5(Lighting 8/20 μs): 5A

DFN1006-2L**Applications**

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

Pin Configuration**Mechanical Characteristics**

- ◆ DFN1006-2L Package
- ◆ Quantity Per Reel : 10,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free

Absolute Maximum Ratings

Symbol	Parameter	Value	Units
I_{PP}	Peak pulse current ($t_P=8/20\mu\text{s}$)	5	A
V_{ESD}	ESD according to IEC61000-4-2 air discharge	± 25	kV
	ESD according to IEC61000-4-2 contact discharge	± 25	
T_A	Ambient Temperature Range	$-55 \sim +125$	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

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SE05N6R01GU

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Electrical Characteristics (T_A = 25 °C, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse working voltage	V _{RWM}	T _A =25°C	--	--	5.0	V
Breakdown voltage	V _{BR}	I _T = 1mA ;T _A =25°C	5.6	6.5	8.4	V
Reverse leakage current	I _R	V _{RWM} = 5V;T _A =25°C	--	--	1.0	μA
Clamping Voltage	V _C	I _{PP} = 1A , t _p = 8/20μs	--	8.5	--	V
Clamping Voltage	V _C	I _{PP} = 5A , t _p = 8/20μs	--	9.5	--	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	--	9.0	--	pF

Typical Characteristic Curves (T_A = 25 °C, unless otherwise noted)

Fig.1 Pulse Waveform -ESD(IEC61000ESD-4-2)

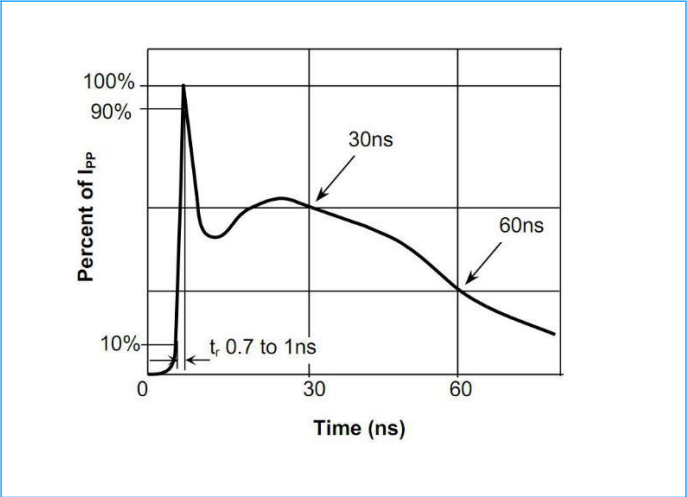


Fig.2 Transmission Line Pulse (TLP)

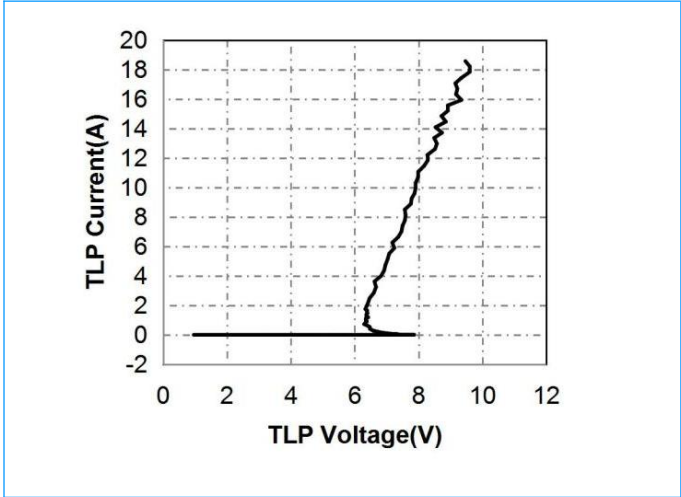
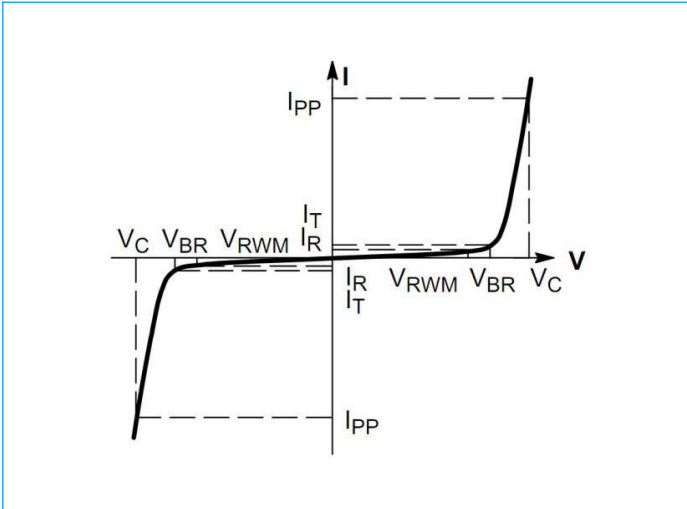


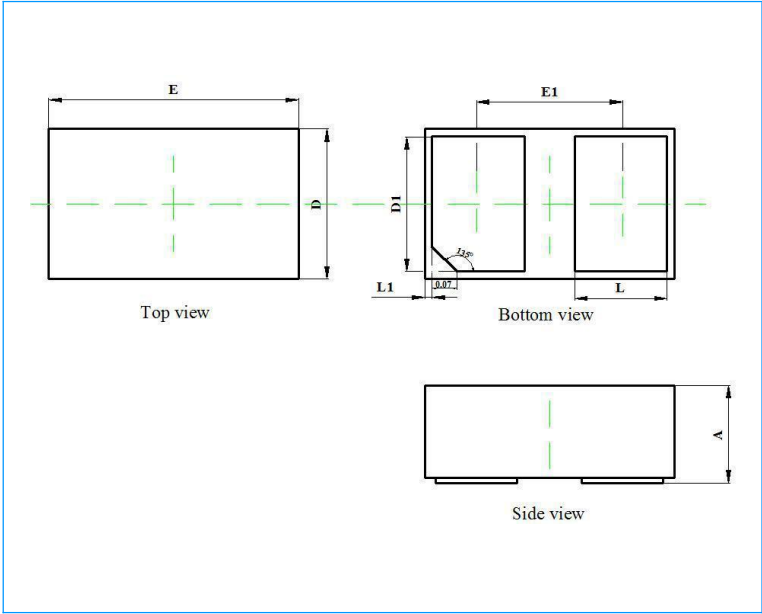
Fig.3 V-I Characteristics for Bidirectional Diode



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DFN1006-2L Package Outline & Dimensions (Unit: mm)



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