



Transient Voltage Suppressors for ESD Protection

Low Capacitance

Features

- ◆ Capacitance: 9pF(typ.)
- ◆ Reverse Working Voltage: 5V
- ◆ IEC61000-4-2(ESD Air): ± 30 kV
- ◆ IEC61000-4-2(ESD Contact): ± 30 kV
- ◆ IEC61000-4-5(Lighting 8/20 μ s): 5A

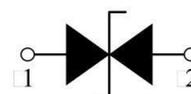
DFN1006-2L



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 ($t_p=8/20\mu s$)	5	A
V_{ESD}	ESD according to IEC61000-4-2 air discharge	± 30	kV
	ESD according to IEC61000-4-2 contact discharge	± 30	
T_A	Ambient Temperature Range	-55 ~ +125	$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 ~ +150	$^{\circ}C$

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SE05N6S01GS

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Electrical Characteristics ($T_A = 25^\circ\text{C}$, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse working voltage	V_{RWM}	$T_A = 25^\circ\text{C}$	--	--	5.0	V
Breakdown voltage	V_{BR}	$I_T = 1\text{mA}; T_A = 25^\circ\text{C}$	5.6	6.5	8.4	V
Reverse leakage current	I_R	$V_{RWM} = 5\text{V}; T_A = 25^\circ\text{C}$	--	--	1.0	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}, t_p = 8/20\mu\text{s}$	--	8.5	--	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}, t_p = 8/20\mu\text{s}$	--	9.5	--	V
Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	--	9.0	--	pF

Typical Characteristic Curves ($T_A = 25^\circ\text{C}$, unless otherwise noted)

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

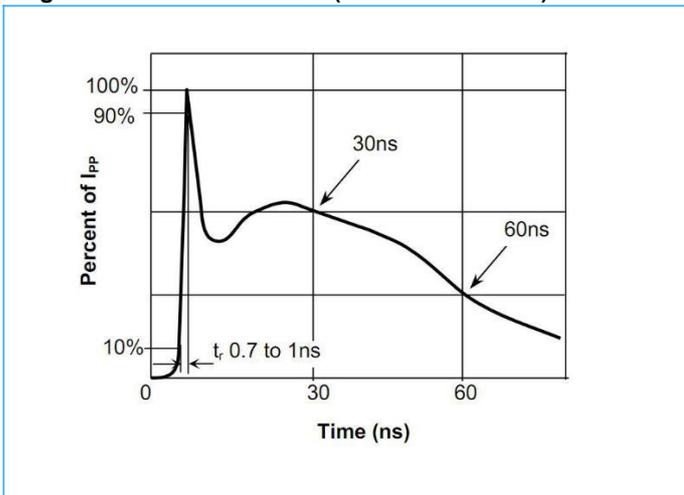


Fig.2 Transmission Line Pulse (TLP)

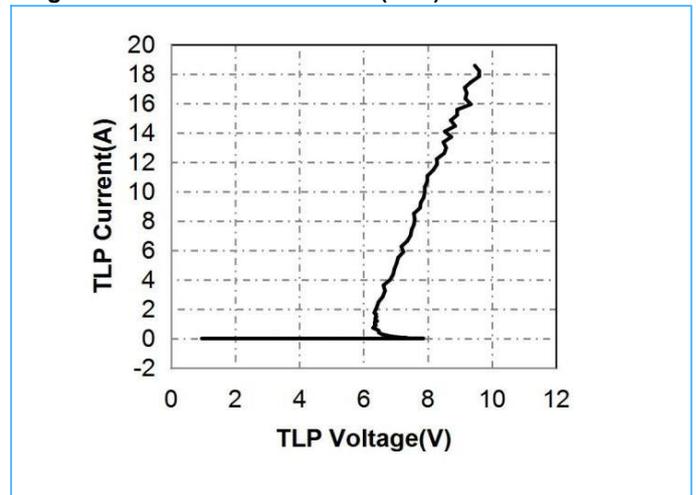
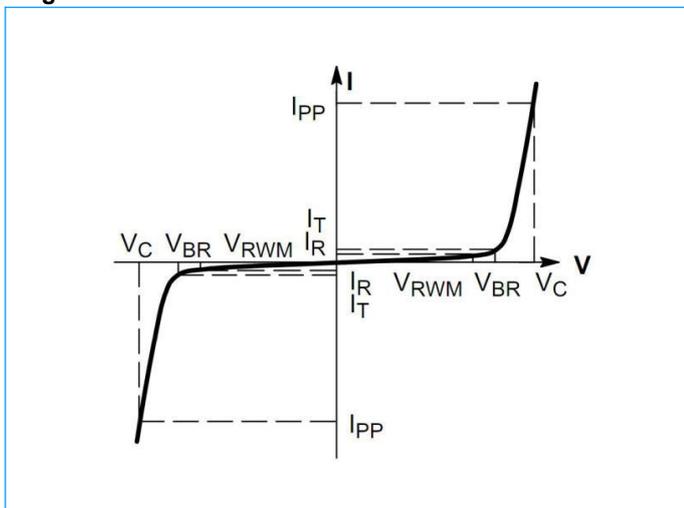


Fig.3 V-I Characteristics for Bidirectional Diode

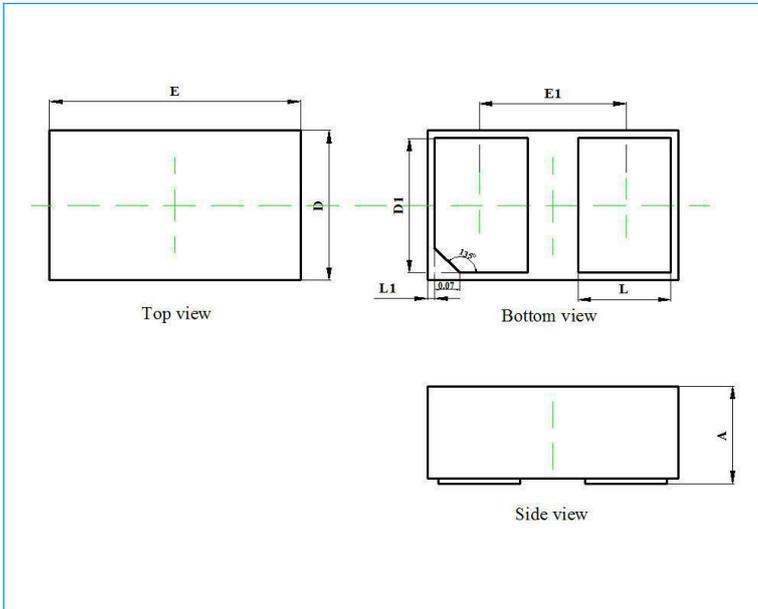


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DFN1006-2L Package Outline & Dimensions (Unit: mm)



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min.	Max.	Min.	Max.
A	0.350	0.550	0.014	0.022
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