



Discription

Low capacitance bidirectional ElectroStatic Discharge (ESD) protection diode in a DFN1006-2L(SOD-882) leadless ultra small Surface-Mounted Device (SMD) plastic package designed to protect one signal line from the damage caused by ESD and other transients.

Features

- ★ Bidirectional ESD protection of one line
- ★ Femtofarad capacitance: $C_j = 15\text{pF}$ (Typ)
- ★ Low clamping voltage $V_C = 11.0\text{V}$ @Max (Max)
- ★ Low leakage current: nA Level
- ★ ESD protection up to 30 kV
- ★ IEC 61000-4-2; level 4 (ESD)
- ★ IEC 61000-4-5 (surge); IPPM = 30 A



DFN1006-2L



Circuit Diagram

Applications

- ★ Portable electronics
- ★ Computers and peripherals
- ★ Audio and video equipment
- ★ Cellular handsets and accessories
- ★ Communication systems
- ★ Power supplies

Ordering Information

Product ID	Pack	Qty(PCS)
LESD8D3.3CBT5G	DFN1006-2L	10000

Absolute Ratings($T_{amb} = 25^{\circ}\text{C}$)

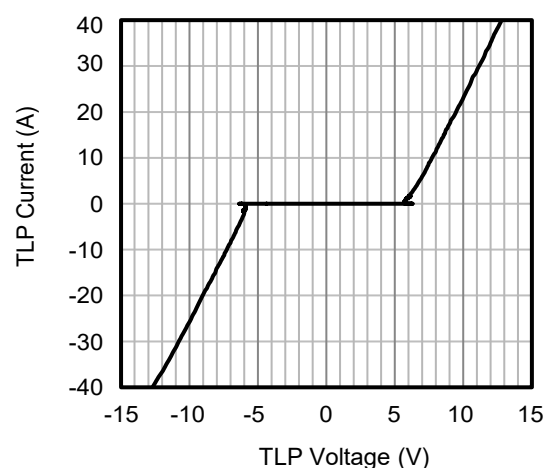
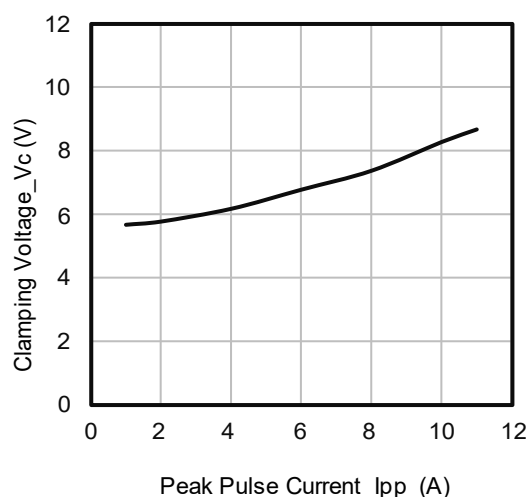
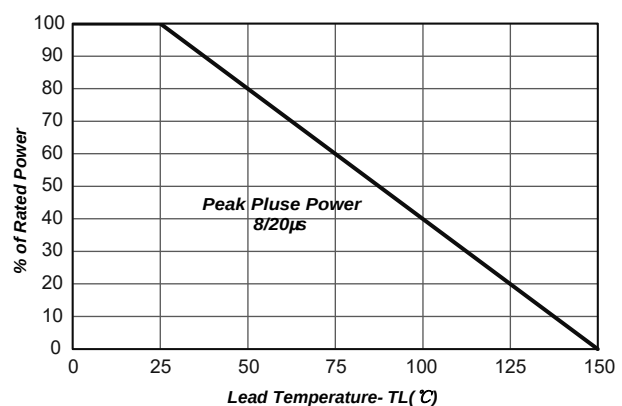
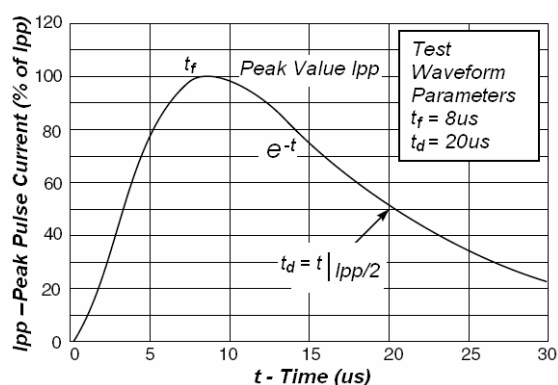
Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20 \mu s$)	100	W
T_L	Maximum lead temperature for soldering during 10s	260	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$
T_{op}	Operating Temperature Range	-55 to +150	$^{\circ}\text{C}$
T_j	Maximum junction temperature	150	$^{\circ}\text{C}$
	IEC61000-4-2 (ESD) air discharge	± 30	KV
	contact discharge	± 30	
	IEC61000-4-4 (EFT)	40	A



Electrical Characteristics

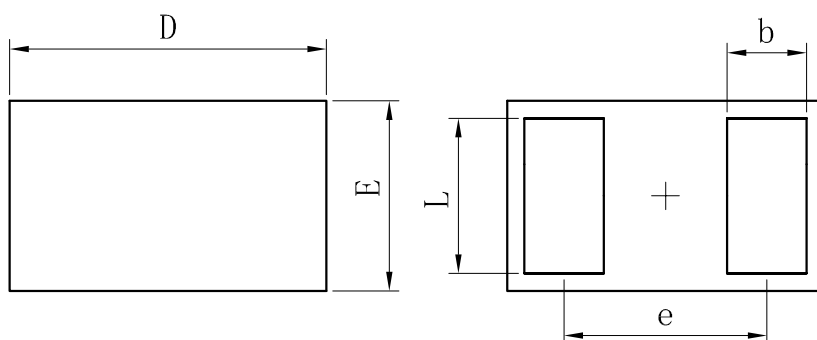
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	5.0		6.5	V
I_R	Reverse Leakage Current	$V_{RWM} = 3.3V$			0.05	μA
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$			7.0	V
		$I_{PP} = 9A, t_p = 8/20\mu s$			11.0	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		15		pF

Typical Characteristics



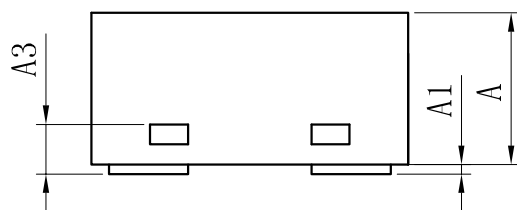


Outline And Dimensions



TOP VIEW

BOTTOM VIEW



SIDE VIEW

DFN1006-2L			
Dim	Min	Typ	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	–	0.64	–
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	–	0.05
A3	0.127REF.		
All Dimensions in mm			

Soldering Footprint



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



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