



Discription

Low capacitance bidirectional ElectroStatic Discharge (ESD) protection diode in a DFN1006(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.

- ★ Bidirectional ESD protection of one line
- ★ Low operating voltage: 24 V
- ★ Low clamping voltage VC = 50V @3A
- ★ Response time is typically<1ns
- ★ Ultra Low Leakage:nAlevel
- ★ IEC 61000-4-2: level 4 (ESD)
- ★ IEC 61000-4-5 (surge): IPPMQ8 A

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)
D24V0L1B2LP-7B	DFN1006-2L	10000



DFN1006-2L



Circuit Diagram



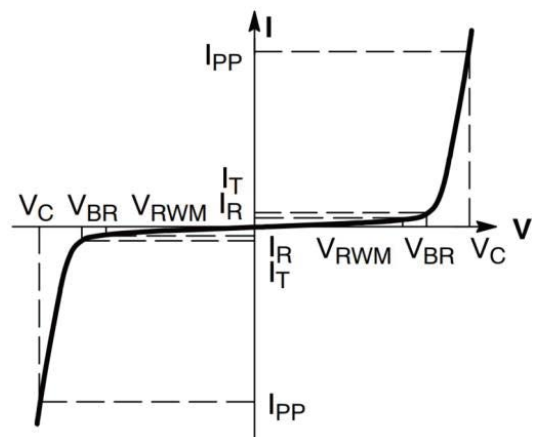
Absolute Ratings(Tamb = 25°C)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8/20μs)	P _{PPM}	150	W
Peak Pulse Current(tp = 8/20μs)	I _{PPM}	8	A
Maximum lead temperature for soldering during 10s	T _L	260	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C
Operating Temperature Range	T _{OP}	-55 to +150	°C
Maximum junction temperature	T _j	150	°C
ESD voltage IEC 61000-4-2 (air discharge)	V _{ESD}	15	kV
ESD voltage IEC 61000-4-2 (contact discharge)	V _{ESD}	8	kV

Electrical Characteristics

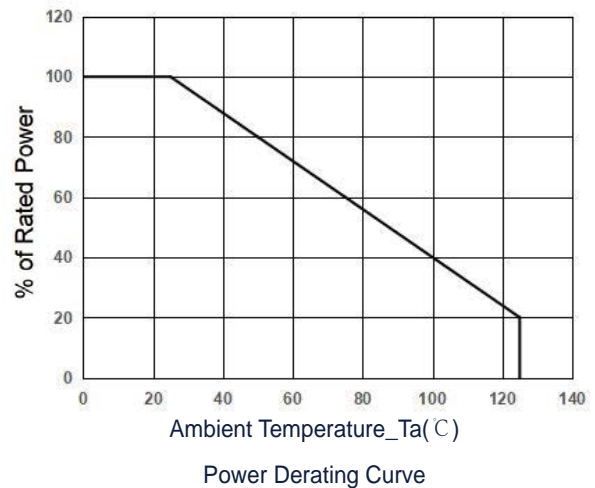
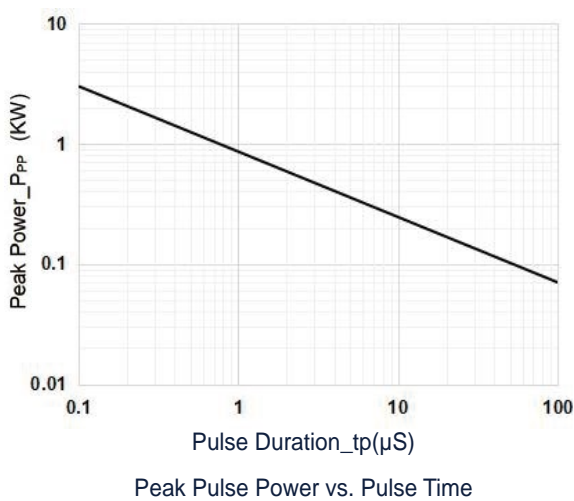
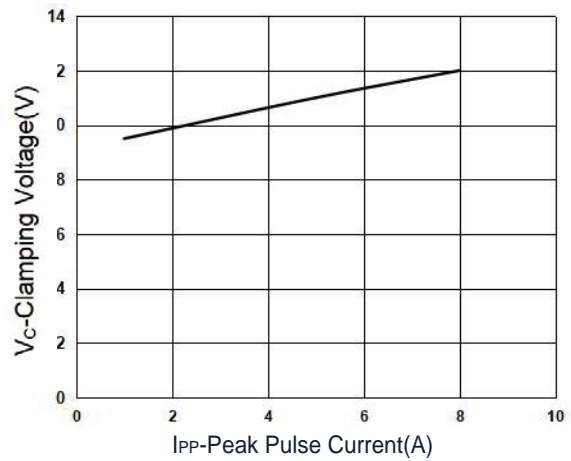
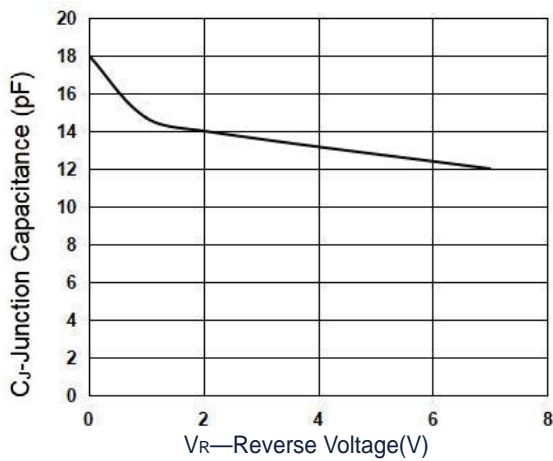
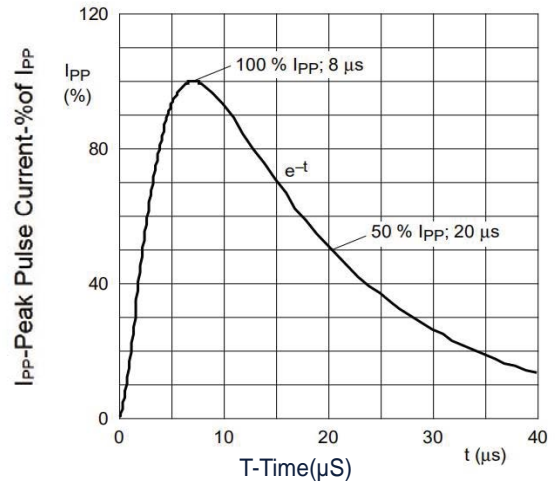
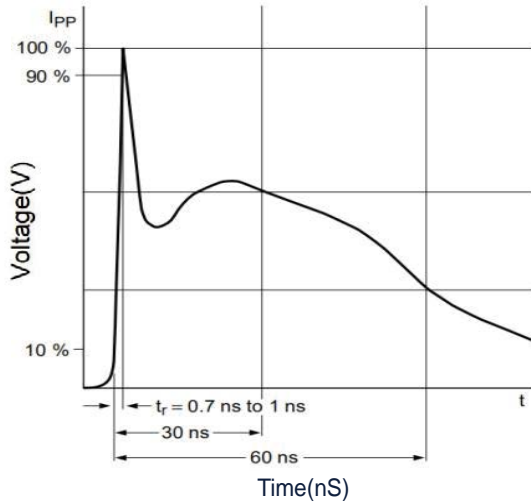
Parameter	Symbol	Min	Typ	Max	Unit	Condition
Reverse Working Voltage	V _{RWM}	--	--	24	V	
Breakdown Voltage	V _{BR}	26	--	32	V	I _T =1mA
Leakage Current I _{Leak}	I _R	--	--	1.0	uA	V _{RWM} =7.0V
Clamping Voltage	V _C	--	--	40	V	I _{PP} =1A, Tp=8/20μs
Clamping Voltage	V _C	--	--	50	V	I _{PP} =3A, Tp=8/20μs
Junction Capacitance	C _J	--	8.0	15	pF	V _R =0V, f=1MHz

Symbol	Parameter
I _{PPM}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage @ I _{PP}
V _{RWM}	Working Peak Reverse Voltage
I _R	Reverse Leakage Current @ V _{RWM}
I _T	Test Current
V _{BR}	Breakdown Voltage @ I _T



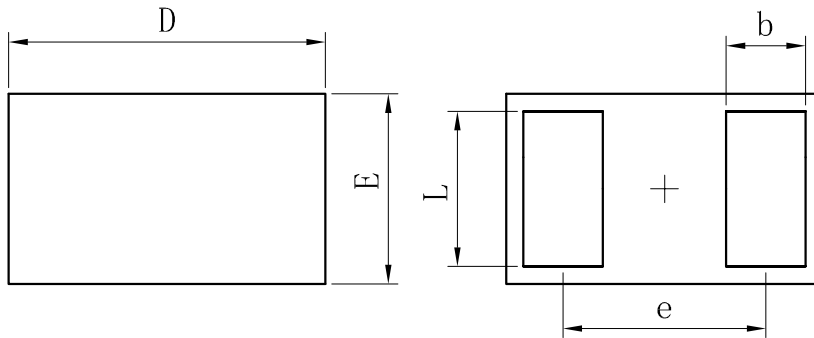


Typical Characteristics



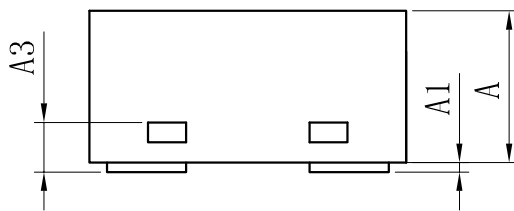


OUTLINE AND DIMENSIONS



TOP VIEW

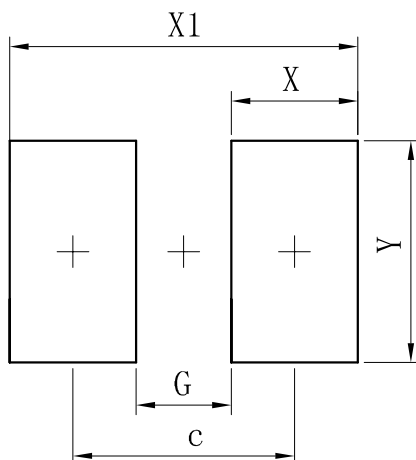
BOTTOM VIEW



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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