



Description

The D8V0L1B2LPQ-7B is designed to protect voltage sensitive components from damage or latch-up due to ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that are exposed ESD for board level. Because of its small size and bi-directional design, it is ideal for use in cellular phones, MP3 players, and portable applications that require audio line protection.



Features

- ★ IEC61000-4-2Level4ESDProtection
 - $\pm 25kV$ Contact Discharge
 - $\pm 25kV$ Air Discharge
- ★ 200W Peak pulse Power (8/20us)
- ★ Low clamping voltage
- ★ Working voltage: 8V
- ★ Low leakage current
- ★ RoHS compliant
- ★ Protecting one bi-directional lines
- ★ Junction capacitance: 10pF Typ.

DFN1006-2L
(X1-DFN1006-2)



Circuit Diagram

Applications

- ★ Cellular handsets and accessories
- ★ Battery Protection
- ★ Notebooks & Handhelds
- ★ Mobile Phones
- ★ MP3P layers
- ★ Peripherals

Ordering Information

Product ID	Pack	Qty(PCS)
D8V0L1B2LPQ-7B	DFN1006-2L(X1-DFN1006-2)	10000



Absolute Ratings(Tamb = 25°C)

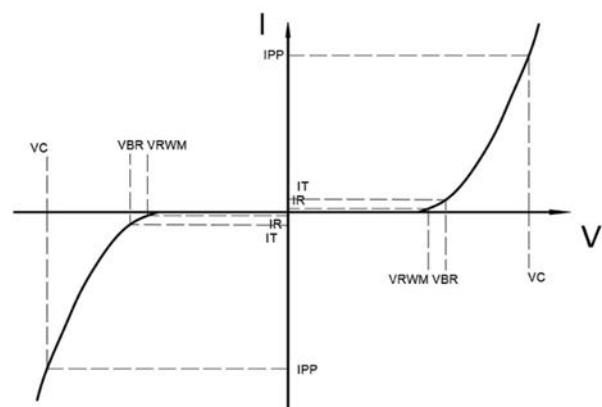
Parameters	Symbol	Min	Max	Unit
Peak pulse power (tp=8/20us)@25°C	P _{pk}	-	200	W
ESD (IEC61000-4-2 air discharge) @25°C	V _{ESD}	-	±25	kV
ESD (IEC61000-4-2 contact discharge) @25°C	V _{ESD}	-	±25	kV
Junction temperature	T _J	-	150	°C
Operating temperature	T _{OP}	-55	150	°C
Storage temperature	T _{STG}	-55	150	°C
Lead temperature	T _L	-	260	°C

Electrical Characteristics

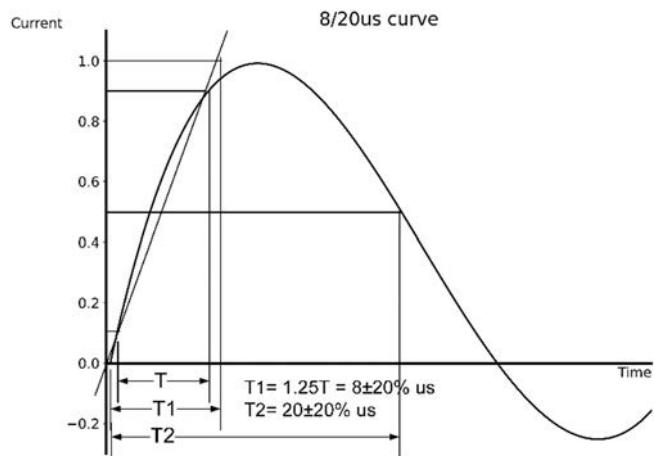
Parameters	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V _{RWM}				8.0	V
Reverse Breakdown Voltage	V _{BR}	IT=1mA	9.0			V
Reverse Leakage Current	I _R	V _{RWM} =8V			1.0	uA
Clamping Voltage	V _C	I _{PP} =1A;tp=8/20us		13		V
Clamping Voltage	V _C	I _{PP} =6A;tp=8/20us		16		V
Junction Capacitance	C _J	VR=0V;f=1MHz		10		pF



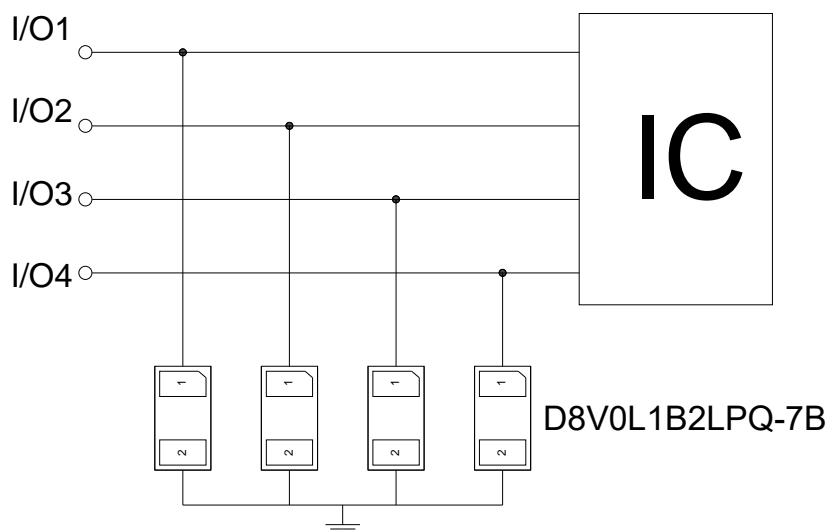
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}



Typical Characteristics

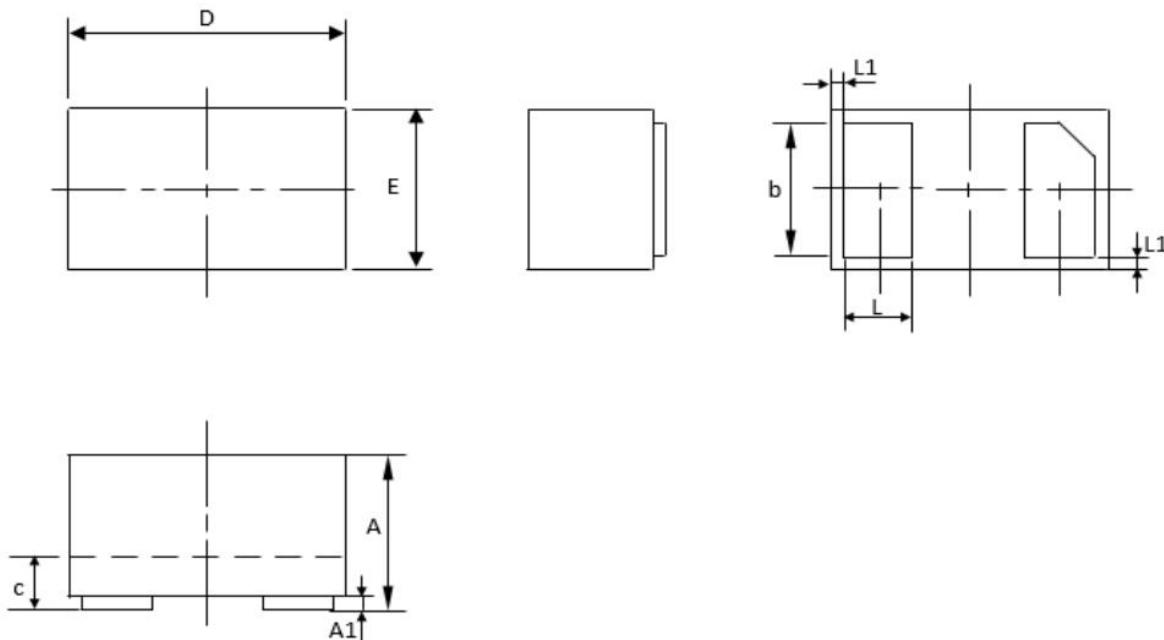


Typical Application





Outline And Dimensions



DFN1006-2L(X1-DFN1006-2)			
Dim	Min	Typ.	Max
A	0.46	0.48	0.50
A1	0	0.02	0.05
b	0.45	0.5	0.55
c	0.1	0.12	0.14
D	0.95	1.00	1.05
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.035	0.05	0.065
h	0.07	0.12	0.17

All Dimensions in mm



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