D8V0L1B2LPQ-7B
ESD PROTECTION DIODE

Discription

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.



DFN1006-2L
(X1-DFN1006-2)



Circuit Diagram

Features

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

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

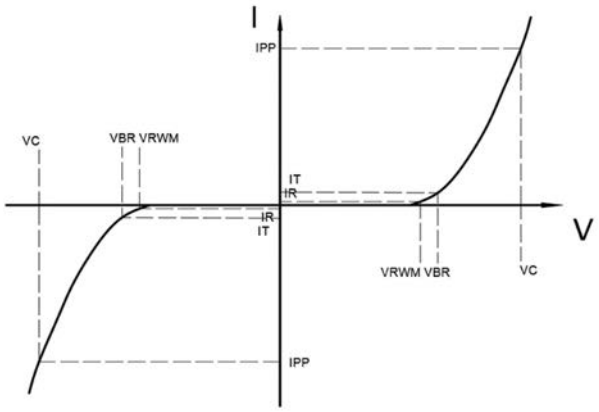
Absolute Ratings(Tamb = 25°C)

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	℃
Operating temperature	T_{OP}	-55	150	℃
Storage temperature	T_{STG}	-55	150	℃
Lead temperature	T_L	-	260	℃

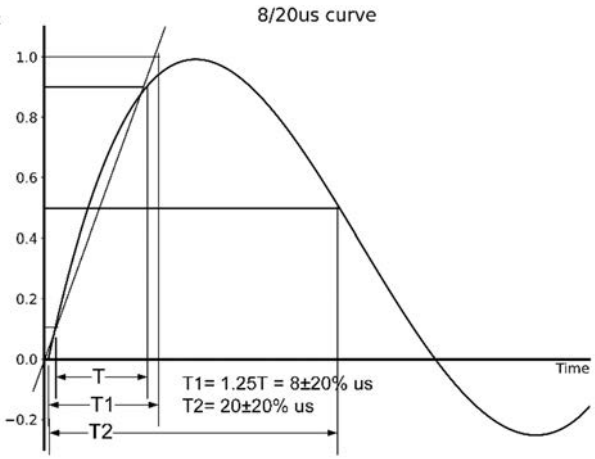
Electrical Characteristics

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

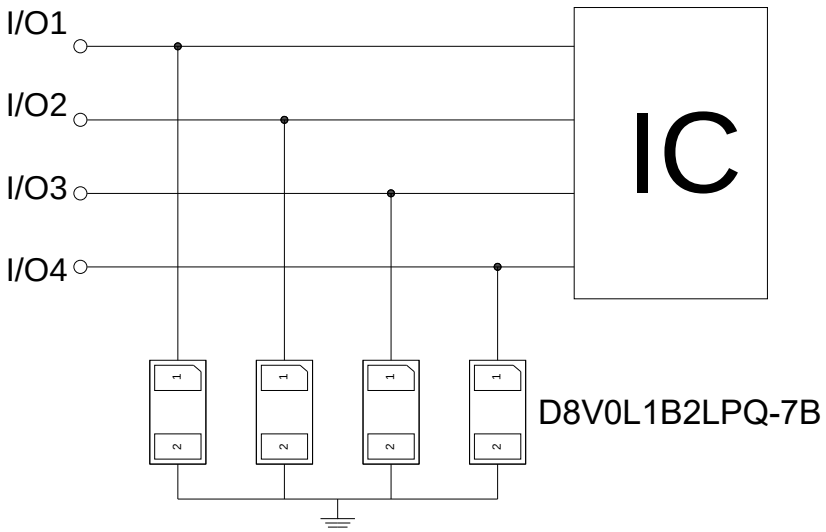
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ VRWM
V_{BR}	Breakdown Voltage @ IT
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ IPP



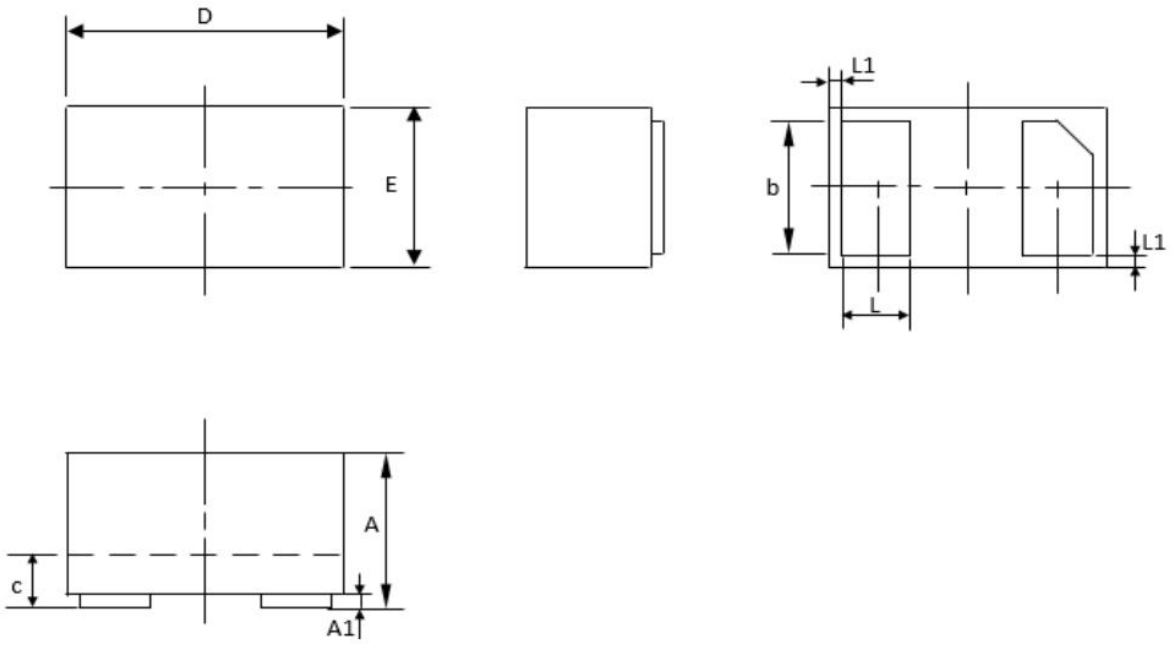
Typical Characteristics



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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