AQ1210-01ETG
ESD PROTECTION DIODE

Discription

The AQ1210-01ETG 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



Circuit Diagram

Features

- ★ IEC61000-4-2Level4ESDProtection
  - ±25kV Contact Discharge
  - ±25kV Air Discharge
- ★ 150W Peak pulse Power(8/20us)
- ★ Low clamping voltage
- ★ Working voltage:5V
- ★ Low leakage current
- ★ RoHS compliant
- ★ Protecting one bi-directional lines
- ★ Junction capacitance:25pF Typ.

Applications

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

Ordering Information

Product ID	Pack	Qty(PCS)
AQ1210-01ETG	DFN1006-2L	10000

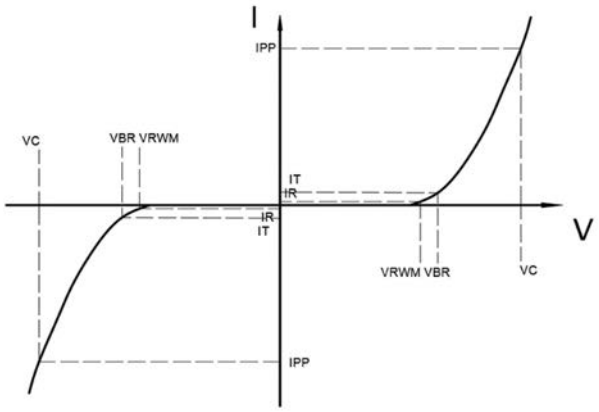
Absolute Ratings(Tamb = 25°C)

Parameters	Symbol	Min	Max	Unit
Peak pulse power (tp=8/20us)@25°C	P_{pk}	-	150	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

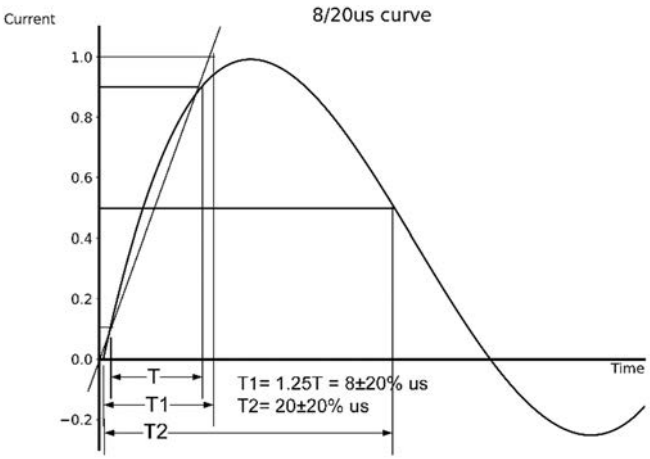
Electrical Characteristics

Parameters	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	IT=1mA	6.0			V
Reverse Leakage Current	I_R	V_{RWM}=5.0v			1.0	uA
Clamping Voltage	V_C	I_{PP}=1A;tp=8/20us		9.0		V
Clamping Voltage	V_C	I_{PP}=15A;tp=8/20us		10		V
Junction Capacitance	C_J	VR=0V;f=1MHz		25		pF

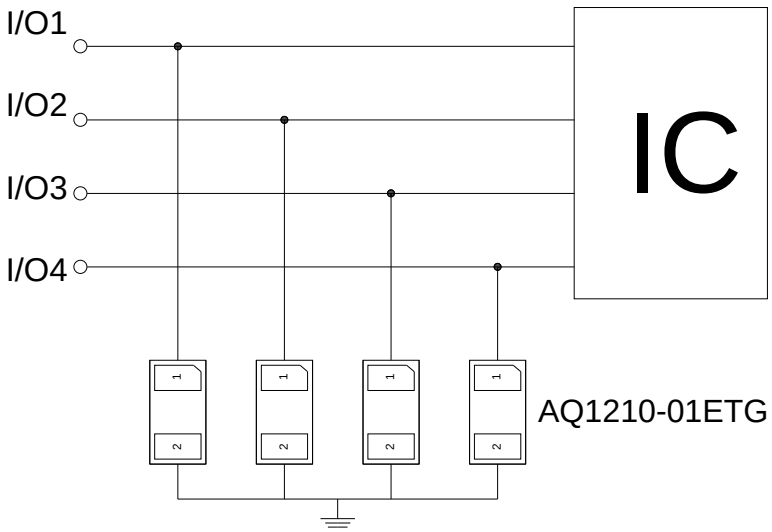
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ VRWM
V_{BR}	Breakdown Voltage @ IT
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ IPP



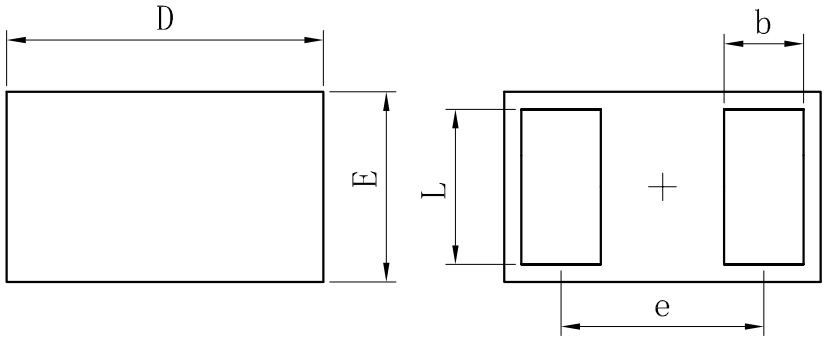
Typical Characteristics



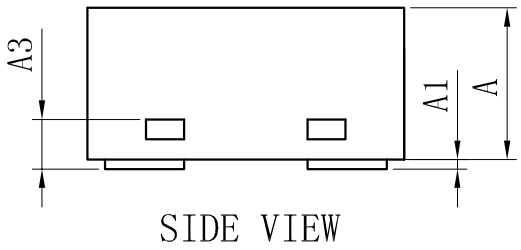
Typical Application



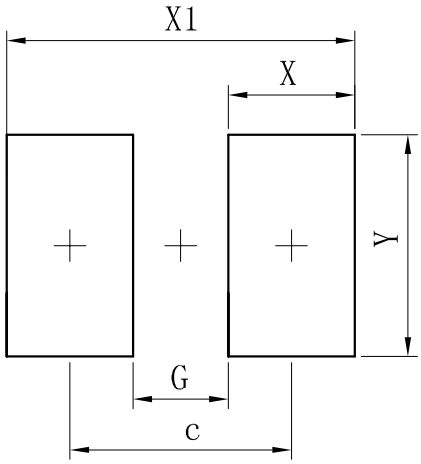
Outline And Dimensions



DFN1006-2L			
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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