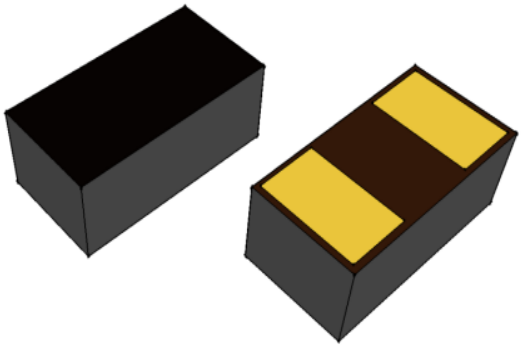
BORN 伯恩半导体 BORN SEMICONDUCTOR

EZAEG2A50AX-N

ESD Protection Diode

»Features

- The best ESD protection for high speed, low voltage applications
- RoHS compliant and halogen free
- Ultra low capacitance, 0.05 pF (typ.)
- Low leakage current (<10nA)
- Fast response time (<1ns)
- Bi-directional, single line protection
- Surface mount
- MSL 3



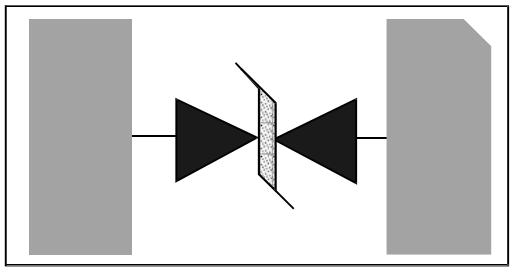
»Applications

- Smart Phone/Mobile Internet Device
- Laptop/Desktop Computer
- Antennas
- High Speed Ethernet
- USB 2.0 and USB 3.0
- Lightning and Thunder Bolt Interface

»Mechanical Data

- Surface mount
- RoHS Compliant
- Halogen Free

»Schematic & PIN Configuration



DFN1006

»Absolute Maximum Rating

Rating	Symbol	Conditions	Value	Units
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}		8 15	kV
Lead Soldering Temperature	T_L		260(10seconds)	℃
Operating Temperature	T_O		-55 to + 125	℃
Storage Temperature	T_{stg}		-40 to + 125	℃

»Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Continuous Operating Voltage	V_{DC}				24	V
Trigger Voltage	V_T	IEC61000-4-2 8KV contact discharge		450		V
Leakage Current	I_L	VDC=24V,T=25 ℃			10	nA
Clamping Voltage	V_C	IEC61000-4-2 8KV contact discharge		40		V
Capacitance	C_P	Measured at 10MHz		0.05		pF
ESD Pulse Withstand	Pulses	IEC61000-4-2 8KV contact discharge	1000			

»ESD Clamping Test

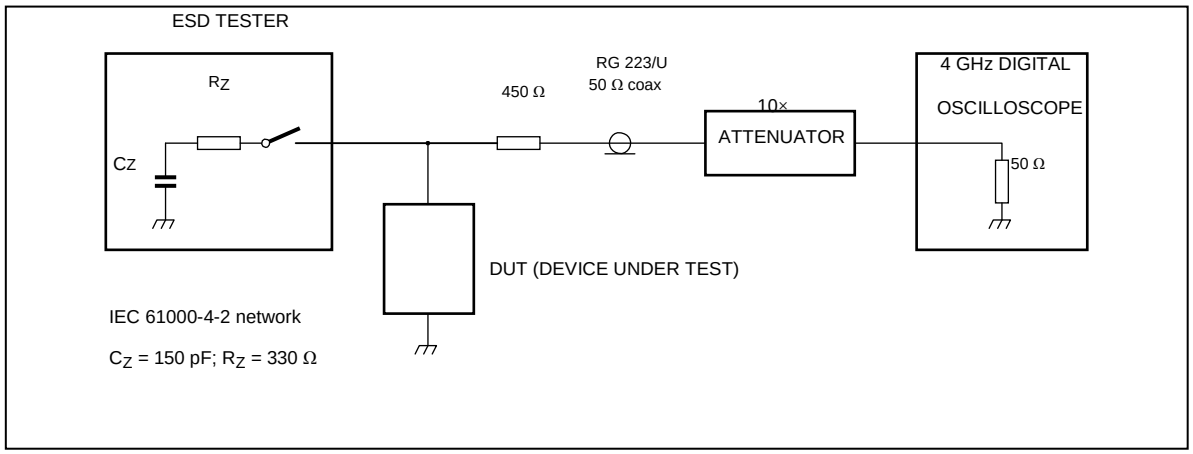


Fig.1 ESD Clamping Test Waveform

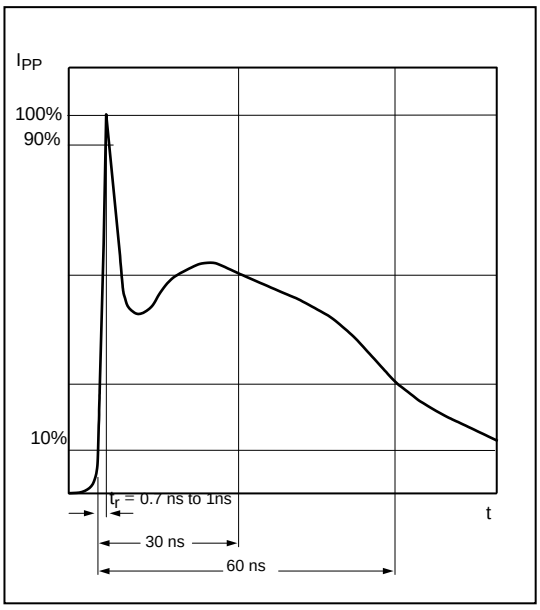


Fig.2 ESD Waveform after Clamping

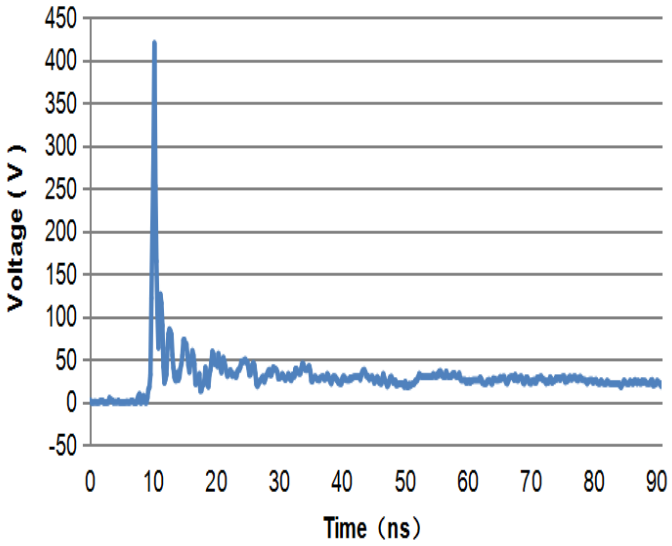
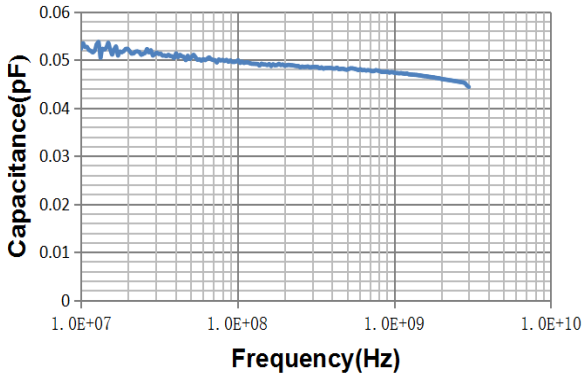
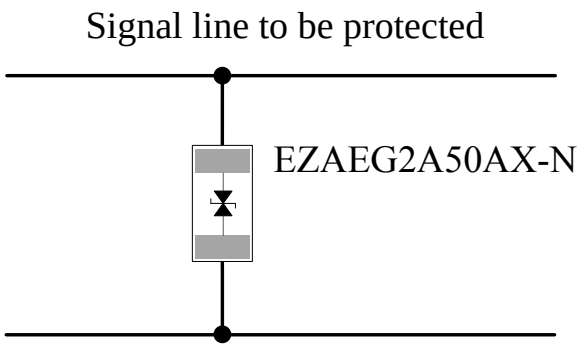


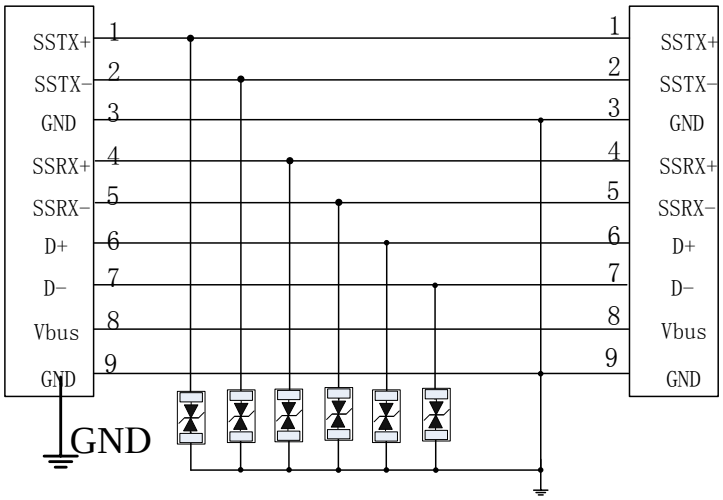
Fig.3 Capacitance VS Frequency



»Outline Drawing – DFN1006

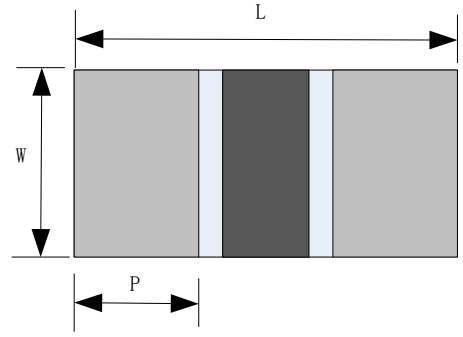


EZAEG2A50AX-N in Signal line protected



EZAEG2A50AX-N in USB3.0 application

»Outline Drawing – DFN1006



Bottom view



Side view

Dimension	Unit: Millimeters		
	Min.	Typ.	Max.
L	0.90	1.00	1.10
W	0.42	0.52	0.62
P	0.15	0.25	0.35
H	0.25	0.38	0.45

»Ordering information

Order code	Package	Base qty	Delivery mode
EZAEG2A50AX-N	DFN1006	10k	Tape and reel

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

BORN:

1.5SMBJ18CA BDFN2C031V ESDA14V2L MMBZ27VCLT1G-N SM24CANB-02HTG-N 5.0SMDJ15CA BAT46X BML6401 BN5A181V45 1.5SMBJ40CA BDFN1C031V BSD3A241V BSD3C031LX BC858B BST23A052U P4SMA6.8CA S8550 GBJ1510 GBLC03C-N 1N4148WT PSD24-N SMD2920-400/30N 1.0SMBJ6.5A BSD9C051V BWF102N PESD15VL1BA-N BM3134E BSD3A031V MMBZ39VCLT1G-N SMFJ170A