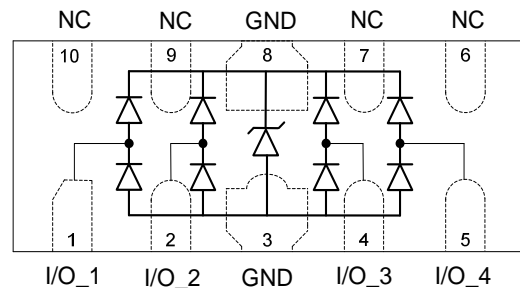


## FEATURES

- Ultra low capacitance: 0.3pF typical (I/O to I/O)
- Ultra low leakage: nA level
- Low operating voltage: 5V
- Low clamping voltage
- Up to 4 data lines and one power line protects
- Complies with following standards
  - IEC 61000-4-2 (ESD) immunity test
    - Air discharge:±25kv
    - Contact discharge: ±20kv
  - IEC 61000-4-4(EFT)40A(5/50ns)
  - IEC 61000-4-5(Lighning): 4A (8/20µs)
- ROHS Compliant



4-Line Protection

## APPLICATIONS

- Serial ATA
- PCI Express
- MDDI Ports
- Display Ports
- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)

## MACHANICAL DATA

- DFN2510 package
- Flammability Rating: UL 94V-0
- Terminal: Matte tin plated.
- High temperature soldering guaranteed:260°C/10s
- Reel size: 7 inch

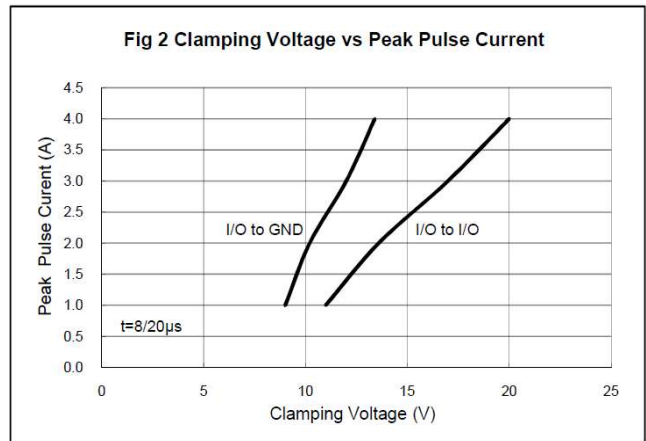
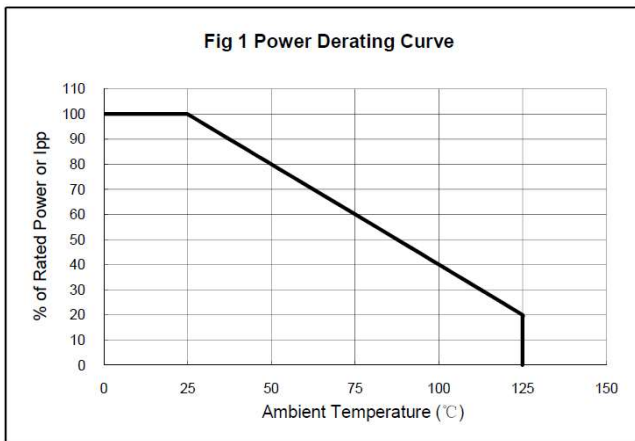
## ABSOLUTE MAXIMUM RATING

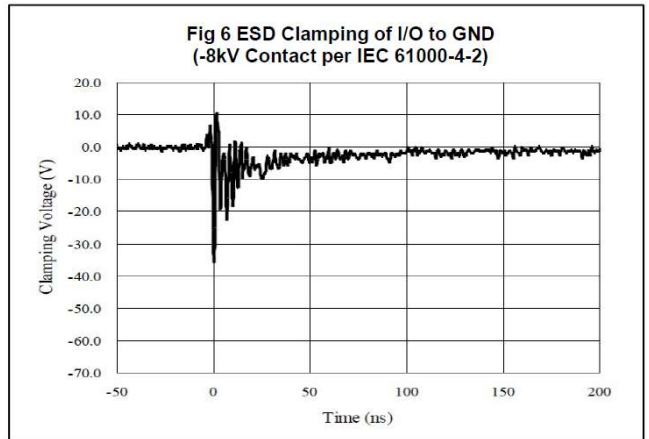
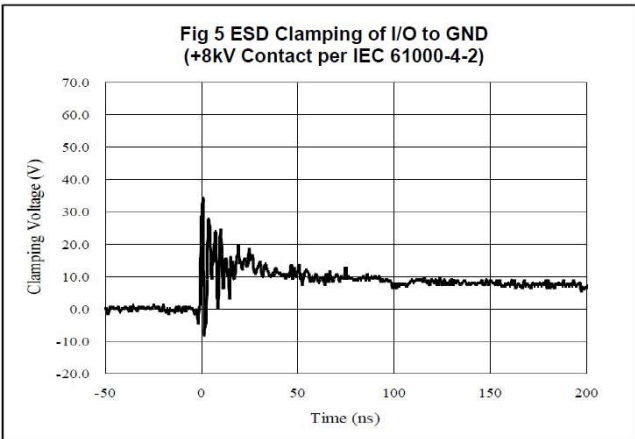
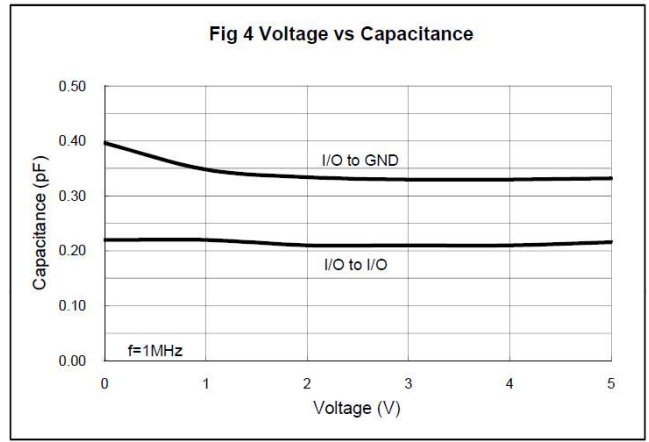
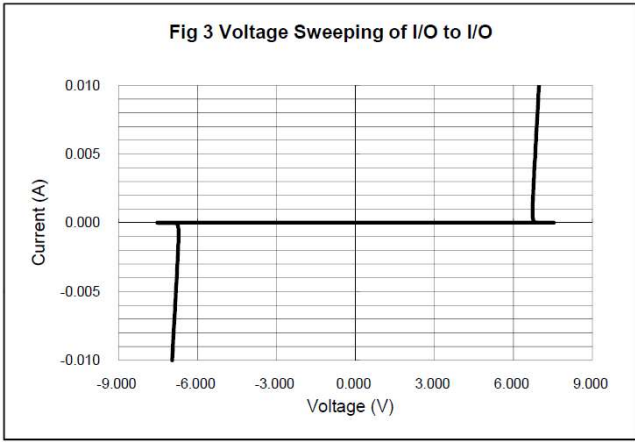
Symbol	Parameter	Value	Units
P <sub>PP</sub>	Peak Pulse Power (8/20µs)	80	W
I <sub>PP</sub>	Peak Pulse Current (8/20µs)	4	A
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	±25 ±20	kV
T <sub>OPT</sub>	Operating Temperature	-55/+125	°C
T <sub>STG</sub>	Storage Temperature	-55/+150	°C

**ELECTRICAL CHARACTERISTICS (Tamb=25 °C)**

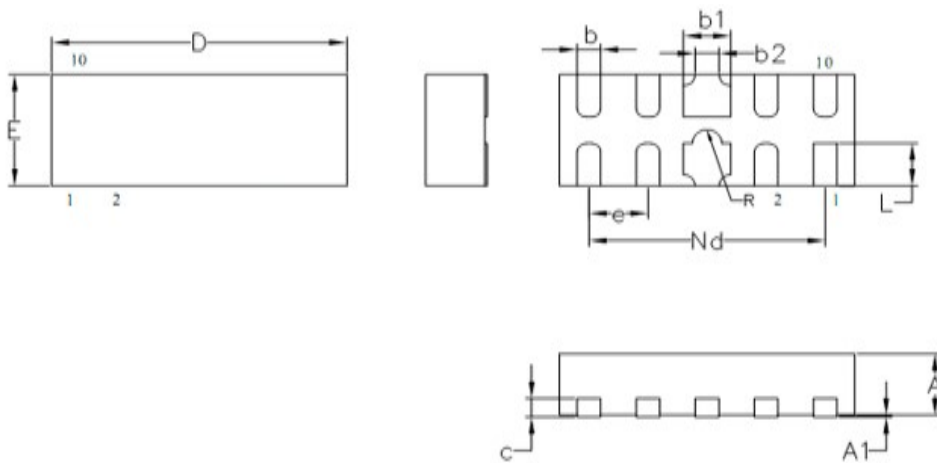
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V <sub>RWM</sub>	Reverse Working Voltage	Any I/O pin to ground			5.0	V
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>T</sub> = 1mA Any I/O pin to ground	7.0	8.0	9.5	V
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> = 5V Any I/O pin to ground			0.1	μA
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 1A, t <sub>p</sub> = 8/20μs Any I/O pin to ground			9	V
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> = 4A, t <sub>p</sub> = 8/20μs Any I/O pin to ground			16	V
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz Between I/O pins		0.3	0.4	pF
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz Between I/O pin to ground			0.8	pF

**ELECTRICAL CHARACTERISTICS CURVE**



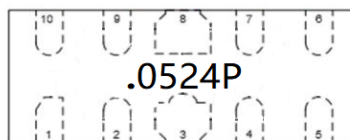


DFN2510 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions (mm)		
	Min.	Nom.	Max.
D	2.45	2.50	2.55
E	0.95	1.00	1.05
b1	0.35	0.40	0.45
b2	0.20REF		
b	0.15	0.20	0.25
L	0.33	0.38	0.43
Nd	2.00BSC		
e	0.50BSC		
R	0.10	0.125	0.15
A	0.45	0.50	0.55
c	0.15REF		
A1	0.00	-	0.05

Marking



Ordering information

Order code	Package	Base qty	Delivery mode
UMW ESD0524P	DFN2510	3000	Tape and reel