

## 1.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
- ROHS Compliant
- Complies with following standards
  - IEC 61000-4-2 (ESD) immunity test
  - Air discharge:  $\pm 25\text{kv}$
  - Contact discharge:  $\pm 20\text{kv}$
  - IEC 61000-4-4(EFT)40A(5/50ns)
  - IEC 61000-4-5(Lighning): 4A(8/20 $\mu\text{s}$ )

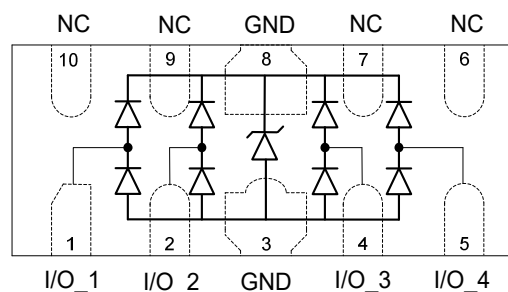
## 2.Applications

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

## 3.Mechanical Data

- DFN2510 package
- Flammability Rating: UL 94V-0
- Terminal: Matte tin plated
- Packaging: Tape and Reel
- High temperature soldering  
guaranted:  $260^{\circ}\text{C}/10\text{s}$
- Reel size: 7 inch

## 4.Pinning information



**DFN2510-10**



## 5. Absolute Maximum Ratings

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

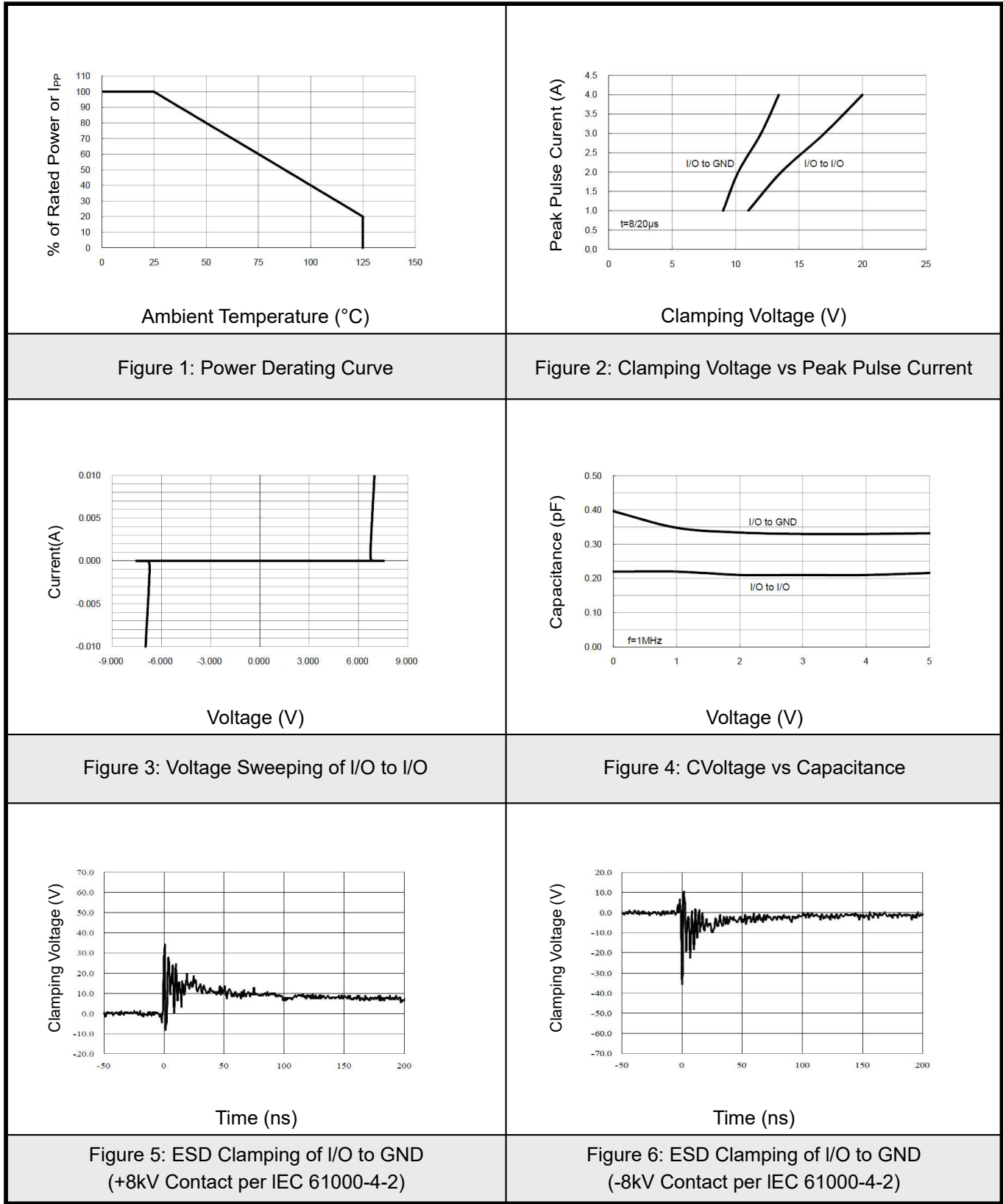


## 6. Electrical Characteristics ( $T_{amb}=25^{\circ}\text{C}$ )

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	$V_{RWM}$	Any I/O pin to ground			5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$ , Any I/O pin to ground	7	8	9.5	V
Reverse Leakage Current	$I_R$	$V_{RWM}=5\text{V}$ , Any I/O pin to ground			0.1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$ , Any I/O pin to ground			9	V
		$I_{PP}=4\text{A}$ , $t_p=8/20\mu\text{s}$ , Any I/O pin to ground			16	V
Junction Capacitance	$C_J$	$V_R=0\text{V}$ , $f=1\text{MHz}$ , Between I/O pins		0.3	0.4	pF
		$V_R=0\text{V}$ , $f=1\text{MHz}$ , Between I/O pin to ground			0.8	pF

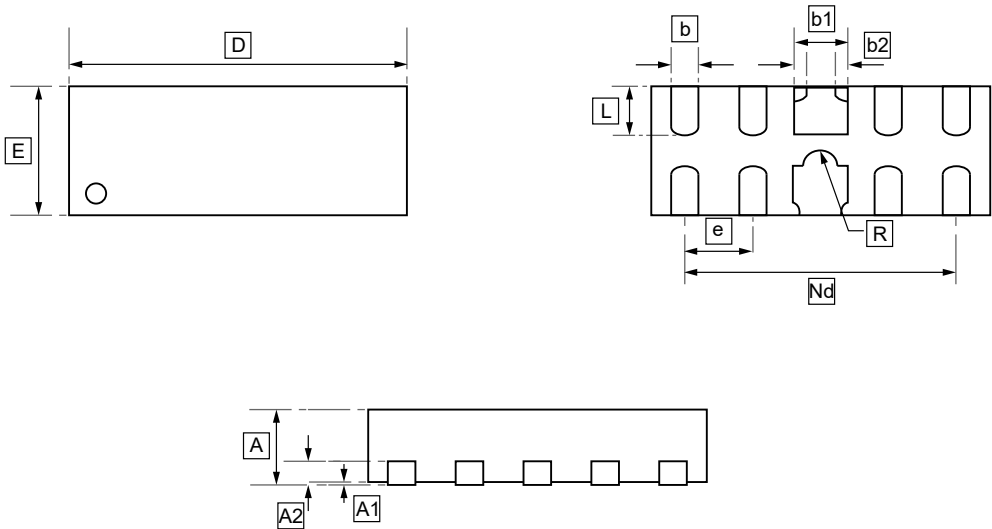


7. Typical characteristic





8.DFN2510-10 Package Outline Dimensions

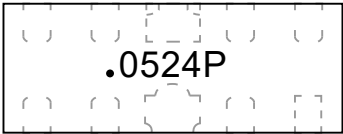


DIMENSIONS (mm are the original dimensions)

Symbol	D	E	b1	b2	b	L	Nd	e	R	A	A1	A2
Min	2.45	0.95	0.35	0.15	0.10	0.33	2.00	0.50	0.125	0.45	0.152	-
Max	2.55	1.05	0.45	0.25	0.20	0.43	BSC	BSC	BSC	0.55	REF	0.05



9.Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW ESD0524P	DFN2510-10	3000	Tape and reel



## 10.Disclaimer

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