



4-Line Uni-directional TVS Diode

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Mechanical Characteristics

- Package: DFN2510-10 (2.5×1.0×0.5mm)
- ♦ Ultra low leakage: nA level
- ◆ Case Material: "Green" Molding Compound.
- ♦ UL Flammability Classification Rating 94V-0
- ♦ Moisture Sensitivity: Level 3 per J-STD-020
- ◆ Terminal Connections: See Diagram Below

Applications

- ♦ High Definition Multimedia Interface (HDMI)
- Digital Visual Interface (DVI)
- Unified Display Interface (UDI)
- ♦ MDDI Ports
- PCI Express
- Serial ATA

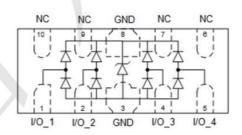
Features

- ◆ Low capacitance: 0.35 pF typical (I/O to I/O)
- Low operating voltage: 5V
- ◆ RoHS Compliant
- ◆ IEC61000-4-2 (ESD) ±25kV (air), ±20kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ηs)
- ◆ IEC61000-4-5 (Lightning) 4.5A(8/20µs)

Ordering Information

Part Number	Qty per Reel	Reel Size	
RCLAMP0524P	3000	7"	

Dimensions and Pin Configuration



Marking: 0524P



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Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Current (8/20µs)	Ipp	4.5	Α
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±25 ±20	kV
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	Any I/O pin to ground
Breakdown Voltage	VBR	6.8		9.5	V	IT = 1mA, any I/O pin to ground
Reverse Leakage Current	I _R			0.08	μΑ	VRWM = 5V, any I/O pin to ground
Clamping Voltage	Vc	7/		17	V	IPP = 4.5A (8 x 20µs pulse), any I/O pin to ground
Junction Capacitance	Сл	/-	0.35		pF	VR = 0V, f = 1MHz, between I/O pins
Junction Capacitance	C1		0.6	0.8	pF	VR = 0V, f = 1MHz, any I/O pin to ground



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Characteristic Curves

Fig1. 8/20µs Pulse Waveform

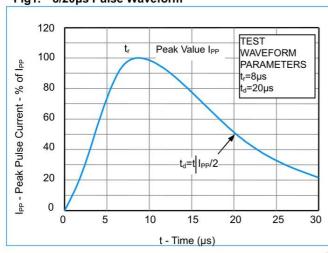
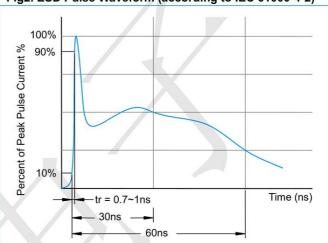


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)





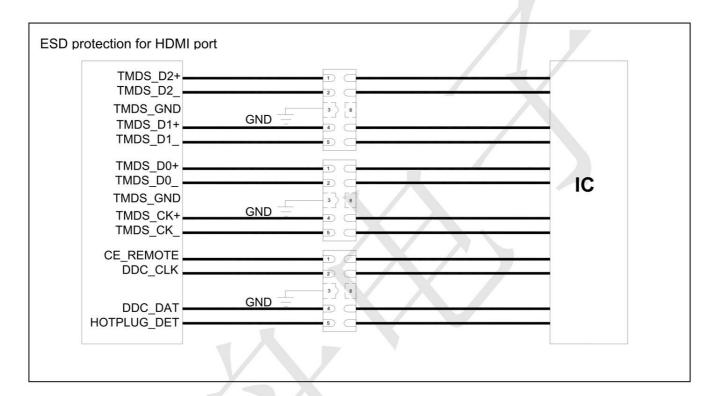




4-Line Uni-directional TVS Diode

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Application Information

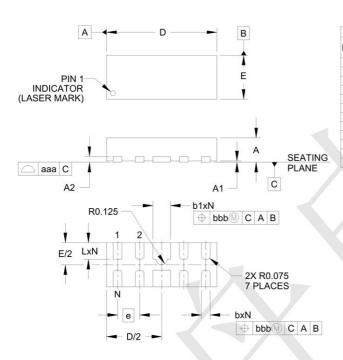




4-Line Uni-directional TVS Diode

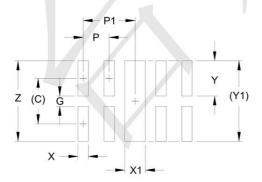
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Outline Drawing - DFN2510-10



		DIM	IENSI	ONS			
DIM	11	INCHES			MILLIMETERS		
DIM	MIN	NOM	MAX	MIN	NOM	MAX	
Α	.020	.023	.026	0.50	0.58	0.65	
A1	0.00	.001	.002	0.00	0.03	0.05	
A2	(.005)			(0.13)			
b	.006	.008	.010	0.15	0.20	0.25	
b1	.014	.016	.018	0.35	0.40	0.45	
D	.094	.098	.102	2.40	2.50	2.60	
Ε	.035	.039	.043	0.90	1.00	1.10	
е	.020 BSC			0.50 BSC			
L	.012	.015	.017	0.30	0.38	0.425	
N	8			8			
aaa	.003			0.08			
bbb	.004			0.10			

Land Pattern - DFN2510-10



	DIMEN	ISIONS
DIM	INCHES	MILLIMETERS
С	(.034)	(0.875)
G	.008	0.20
Р	.020	0.50
P1	.039	1.00
X	.008	0.20
X1	.016	0.40
Υ	.027	0.675
Y1	(.061)	(1.55)
Z	.061	1.55