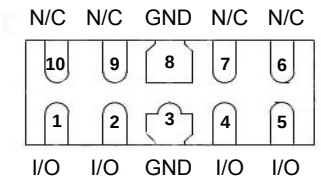
APPLICATIONS

- ►USB2.0,USB3.0,Ethernet
- ►HDMI1.4,Displayport 1.3,eSATA
- ►Unified Display Interface
- ►Digital Visual Interface
- ►High Speed Serial Interface

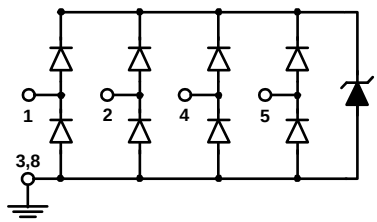
DFN-2510



IECCOMPATIBILITY

- ►IEC61000-4-2 (ESD) ±20kV (air), ±15 kV (contact)
- ►IEC61000-4-5 (Lightning) 6.0A(8/20μs)

PIN CONFIGURATION



FEATURES

- ►60.0 Watts Peak Pulse Power per Line (tp=8/20μs)
- ►Protects Four I/O lines
- ►Operating Voltage: 3.3V
- ►Ultra Low Capacitance: 0.5pF typical (I/O to GND)

MECHANICALCHARACTERISTICS

- ►DFN2510P10 PACKAGE INFORMATION
- ►Quantity Per Reel : 3,000pcs
- ►Lead Finish : Lead Free
- ►Marking : 0324P

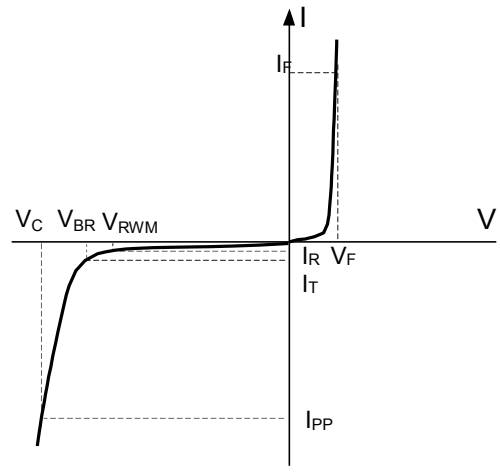
Absolute maximum rating@25℃			
Rating	Symbol	Value	Unit
Peak Pulse Power (tP = 8/20μS)	Ppp	60	W
Lead Solder Temperature −Maximum (10 Seconds)	TL	260	°C
Operating Junction Temperature Range	TJ	−55 to +125	°C
Storage Temperature Range	Tstg	−55 to +150	°C

Electrical characteristics (TA=25 oC, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	TYP.	Max.	Units
Reverse stand-off voltage	V_{RWM}				3.3	V
Reverse leakage current	I_R I/O to GND	V_{RWM}=3.3V			0.5	uA
Reveres breakdown voltage	V_{BR} I/O to GND	I_T=1mA	3.8			V
Forward Voltage	V_F GND to I/O	I_T=10.0mA		0.7	1.2	V
Clamping voltage	V_C I/O to GND	I_{PP}=1A(8/20us)		5.5		V
		I_{pp}= 6A(8/20us)		10.0		V
Junction capacitance	C_J I/O to GND	VR=0V f=1MHz		0.5	0.8	pF
Junction capacitance	C_J I/O to I/O	VR=0V f=1MHz		0.3	0.5	pF

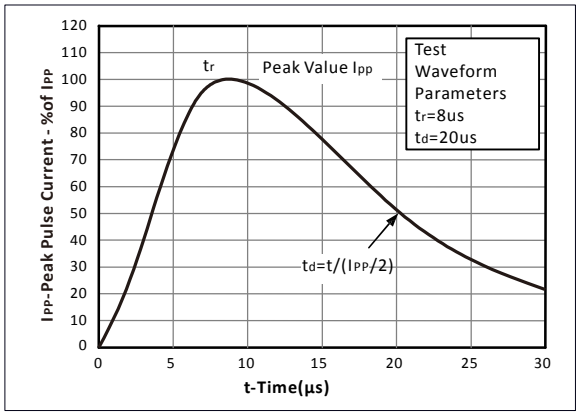
ELECTRICAL CHARACTERISTICS
(T_A = 25°C unless otherwise noted)

Symbol	Parameter
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
P_{PP}	Peak Pulse Power
C_J	Junction Capacitance
I_F	Forward Current
V_F	Forward Voltage @ I_F

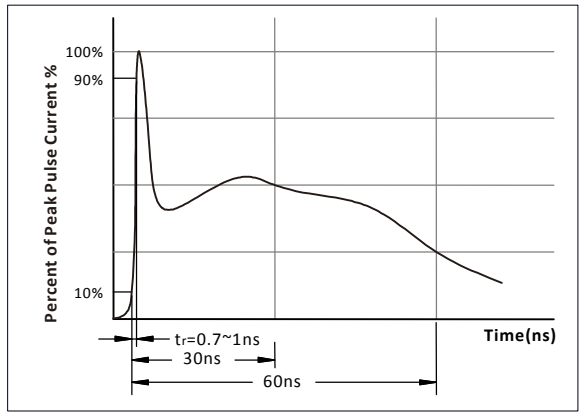


Uni −Directional TVS

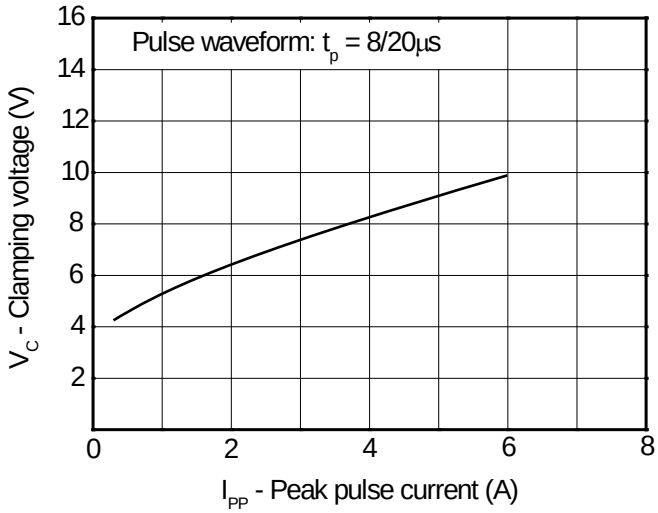
Typical characteristics (T_A=25°C, unless otherwise noted)



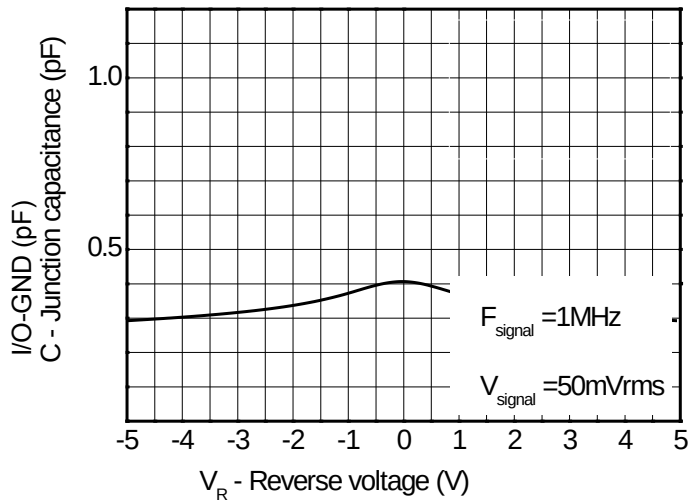
8/20μs Pulse Waveform



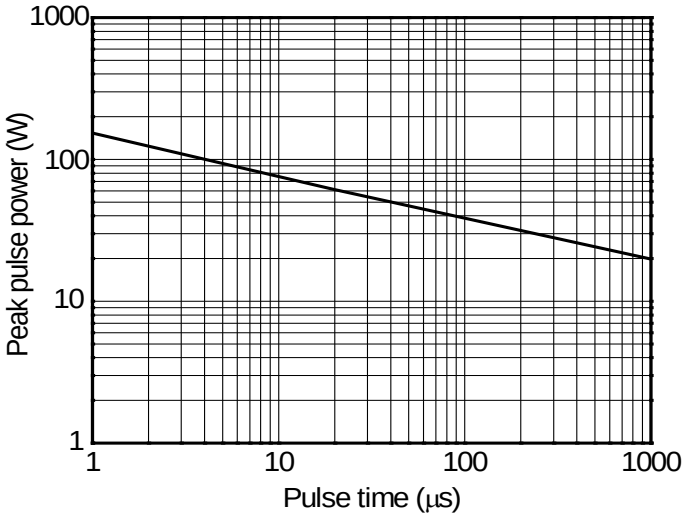
ESD Pulse Waveform (according to IEC 61000 4 2)



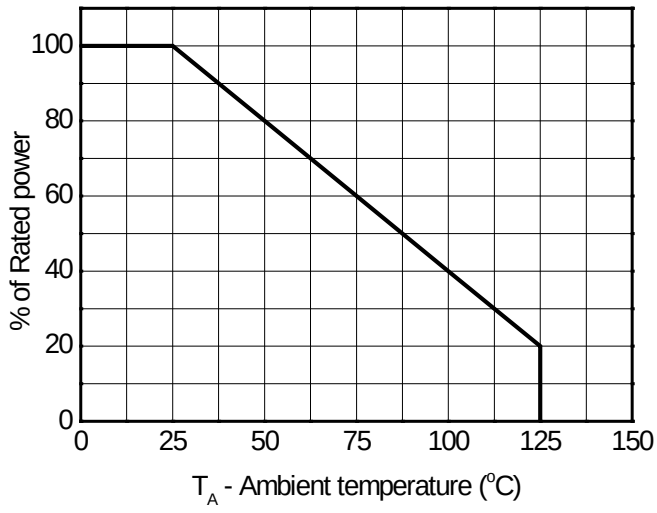
Clamping voltage vs. Peak pulse current



Capacitance vs. Reveres voltage

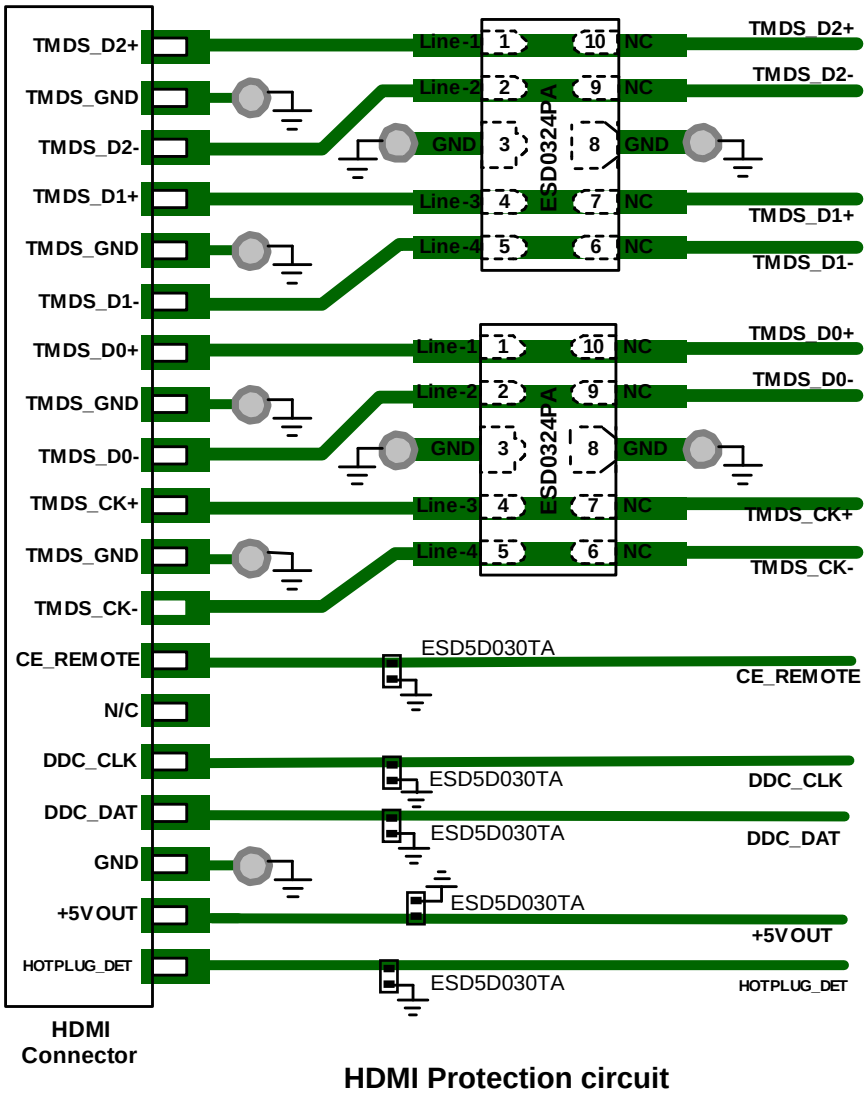


Non-repetitive peak pulse power vs. Pulse time

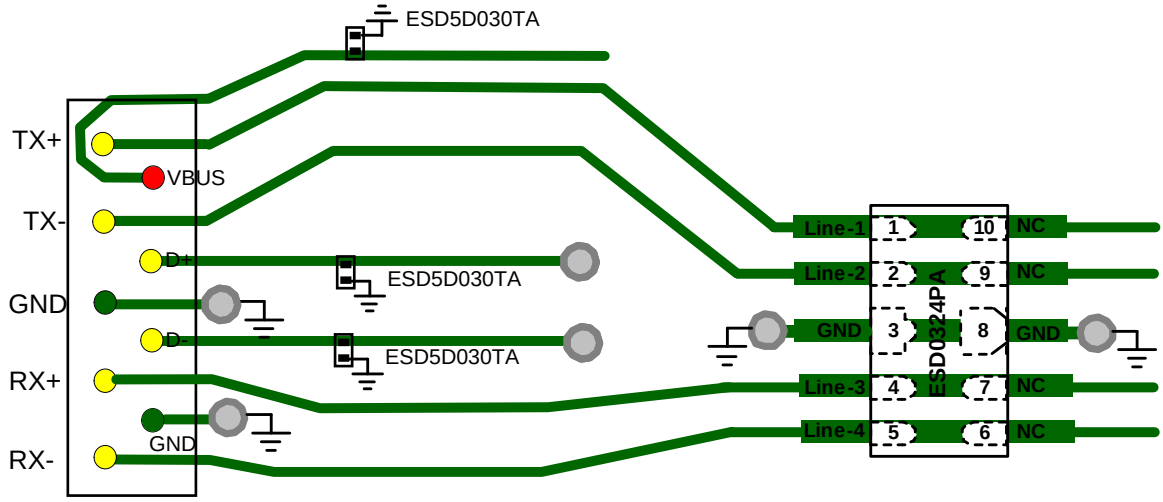


Power derating vs. Ambient temperature

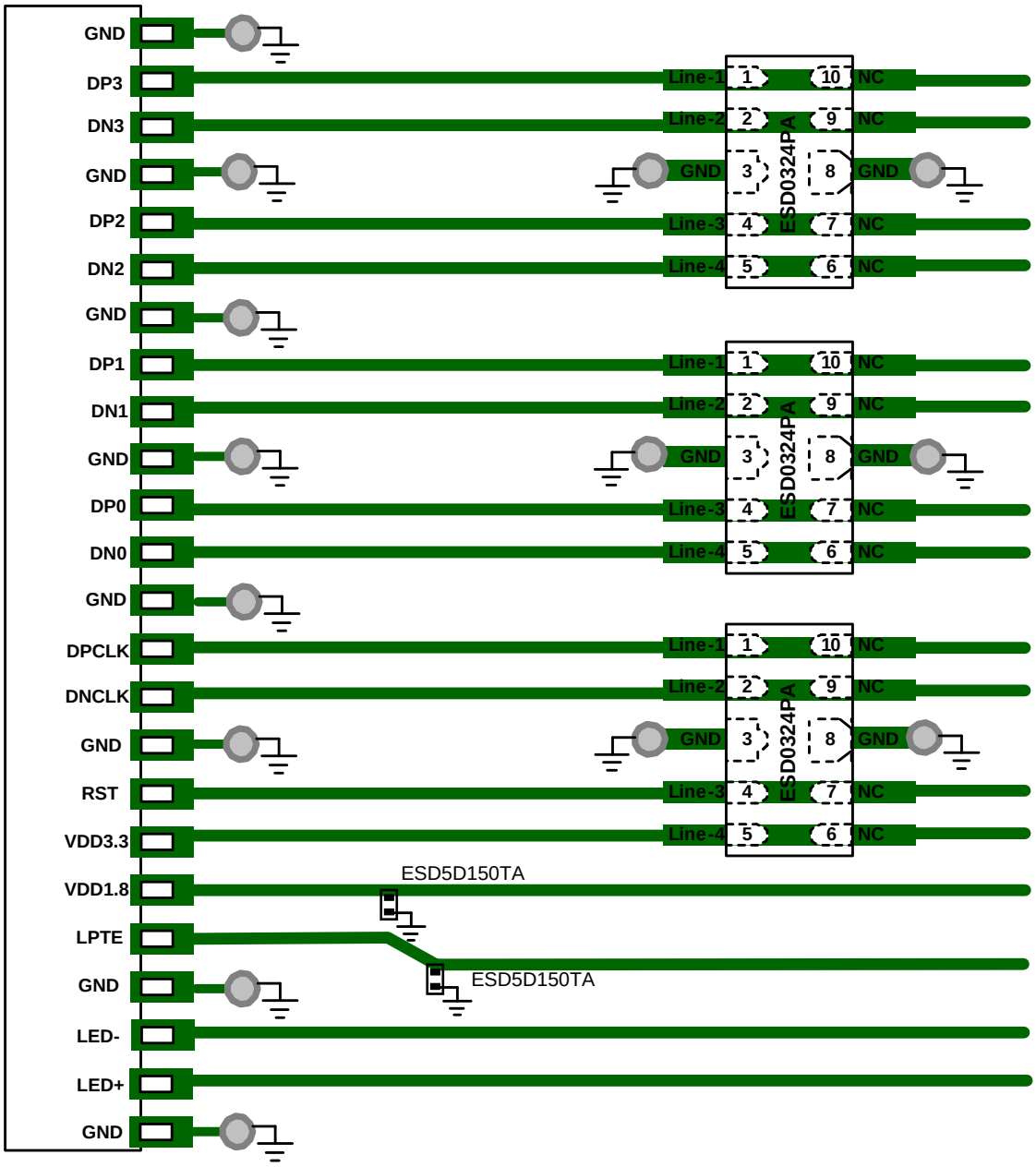
APPLICATION INFORMATION



HDMI Protection circuit

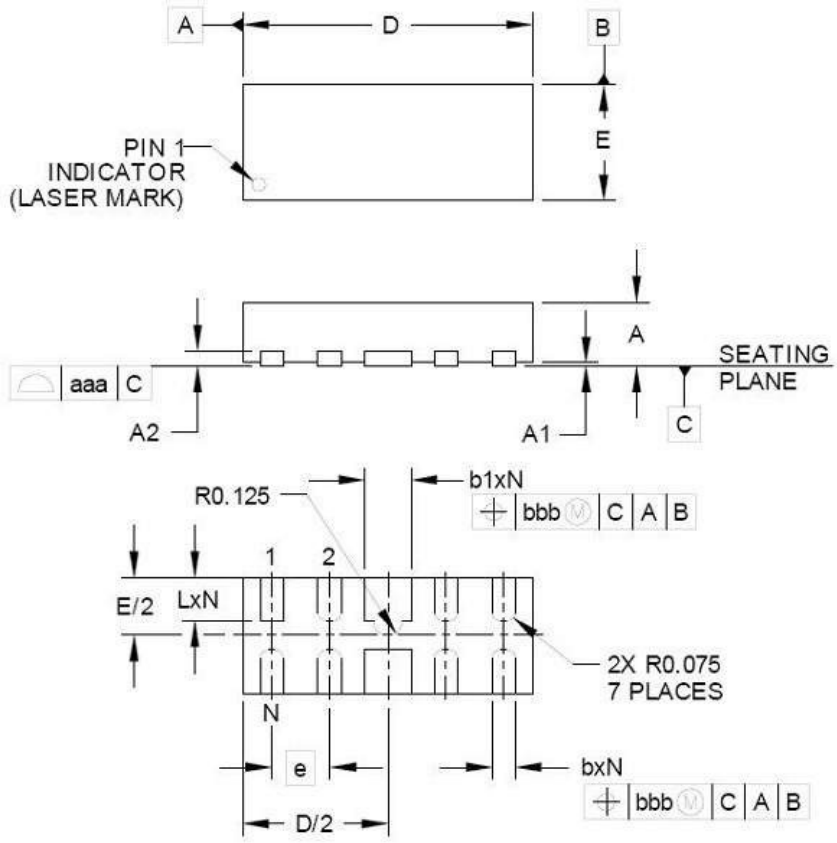


USB3.0 Protection circuit



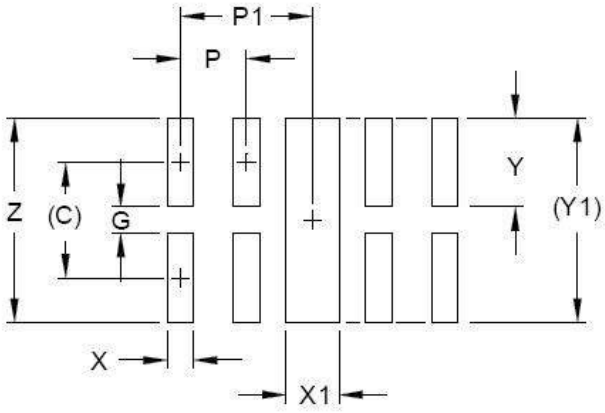
MIPI Protection circuit

DFN2510PACKAGEOUTLINE DIMENSIONS



DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.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
E	.035	.039	.043	0.90	1.00	1.10
e		.020 BSC			0.50 BSC	
L	.012	.015	.017	0.30	0.38	0.425
N		10			10	
aaa		.003			0.08	
bbb		.004			0.10	

*SOLDERINGFOOTPRINT



DIM	INCHES	MILLIMETERS
C	(.034)	(0.875)
G	.008	0.20
P	.020	0.50
P1	.039	1.00
X	.008	0.20
X1	.016	0.40
Y	.027	0.675
Y1	(.061)	(1.55)
Z	.061	1.55