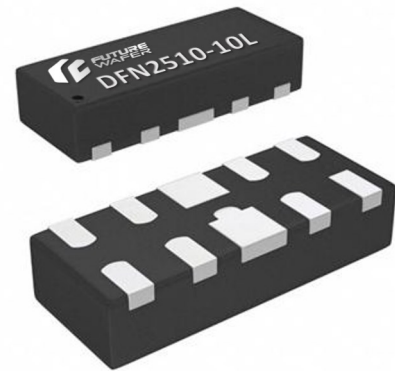
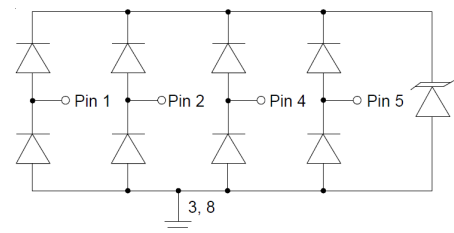


Applications

- Personal Digital Assistance
- Wireless System
- USB3.1
- High Speed Data Line
- Ethernet
- Esata Interfaces



DFN2510-10L



Feature

- With TVS Diode
- ESD Protection:Level 4
- Low Clamping Voltage@I_{PP}=4A,V_C<15V
- 60 Watts peak pulse power per line(tp=8/20uS)
- Ultra low capacitance:0.3pf max.(any I/O to I/O .)
- Protection 4 lines I/O port

IEC Compatibility

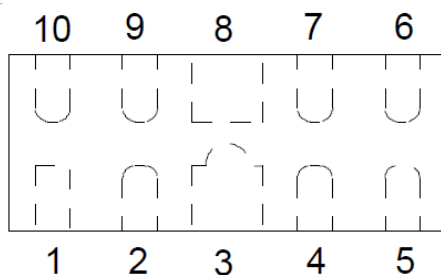
- EN61000-4
- 61000-4-2(ESD):Level 4,Contact:>±20kv,Air::>±25kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):4A,8/20us
- Flow-Through design

Mechanical Characteristics

- Molded JEDEC DFN 10pin package
(2.5x1.0x0.58mm)
- Packing:Tape and Reel
- Flammability rating UL 94V-0
- Halogen Free

Device Characteristics

Maximum Ratings@25 unless otherwise specified			
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us) see fig 1.	PPP	60	Watts
Operating Temperature	TJ	-55~150	°C
Storage Temperature	TSTG	-55~150	°C



Pin	Identification
1,2,4,5	Input lines
6,7,9,10	Output lines
3,8	Ground

Electrical Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	VRWM	Any I/O Pin to GND			5	V
Reverse Breakdown Voltage	VBR	Iz=1mA , Any I/O Pin to GND.	6.1		8.5	V
Reverse Leakage Current	IR@VR=5V	Any I/O Pins to GND.			50	nA
Forward Voltage	VF	IF=15mA GND to any I/O Pins			1.15	V
Clamping Voltage	VC	Ipp=1A tp=8/20us Ipp=4A, tp=8/20us			10 15	V
Junction Capacitance	C I/O-GND C I/O-I/O	Vdc=0V, f=1MHz		0.45 0.25	0.5 0.3	pf

Rating and Characteristic curve

FIGURE 1
Non-repetitive Peak pulse power V.S pulse time

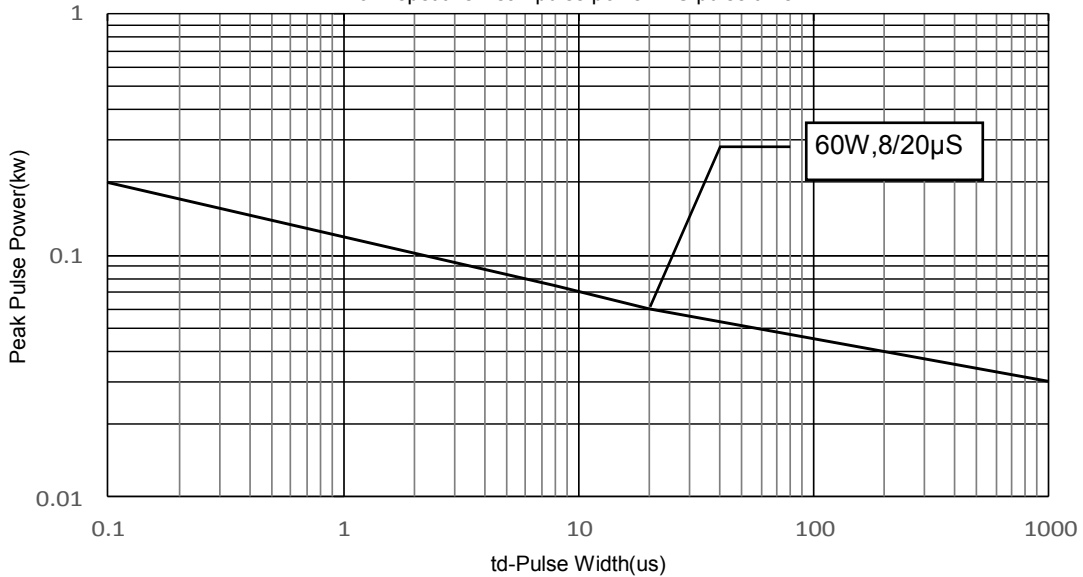


FIGURE 2
Vc&Ipp Drawing(I/O-GND)

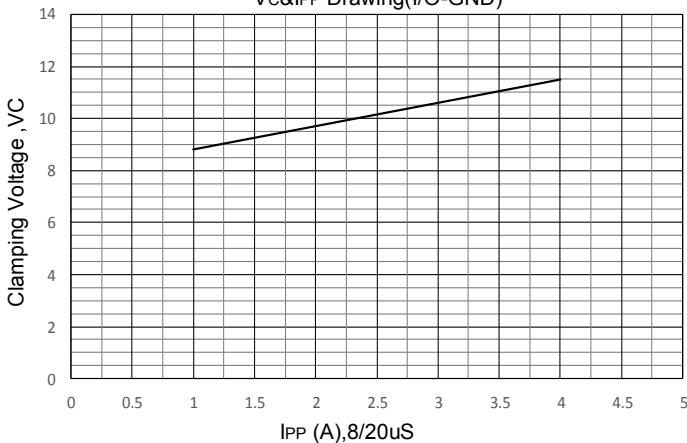
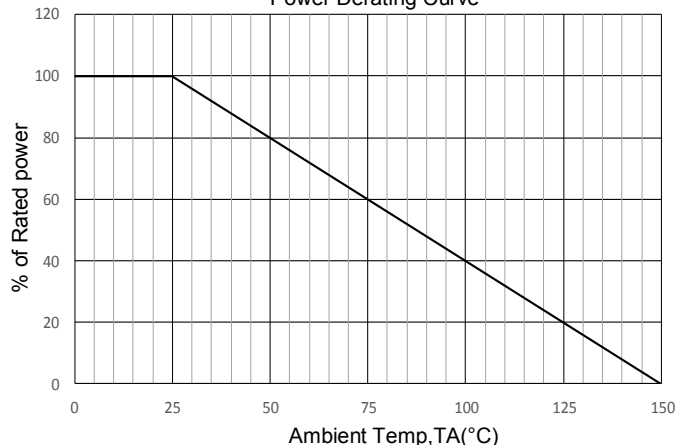


FIGURE 3
Power Derating Curve



Typical Characteristics

FIGURE 4

Normalized Capacitance vs. Reverse Voltage

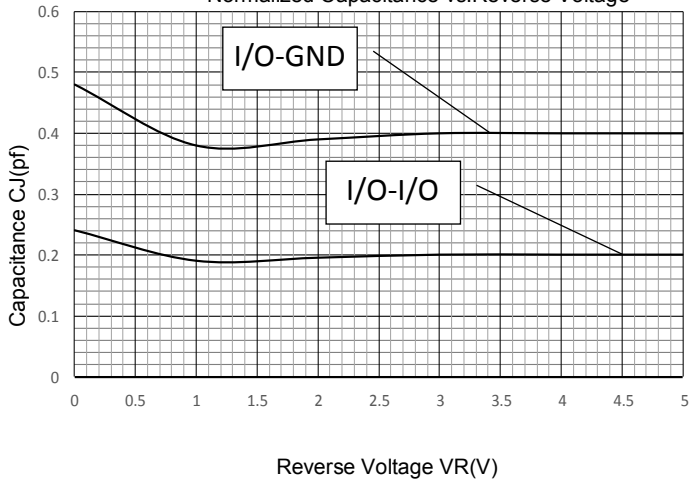
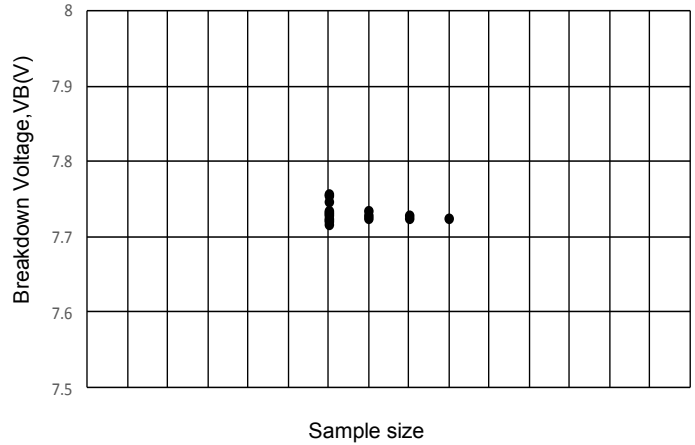


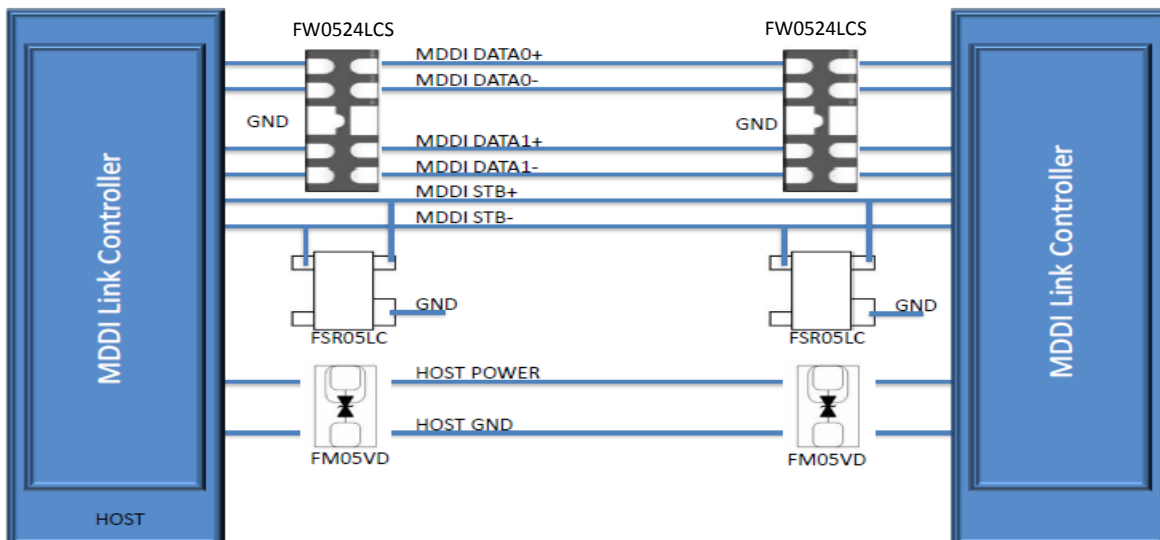
FIGURE 5

Breakdown Voltage V_B Map Any I/O Pin to GND.

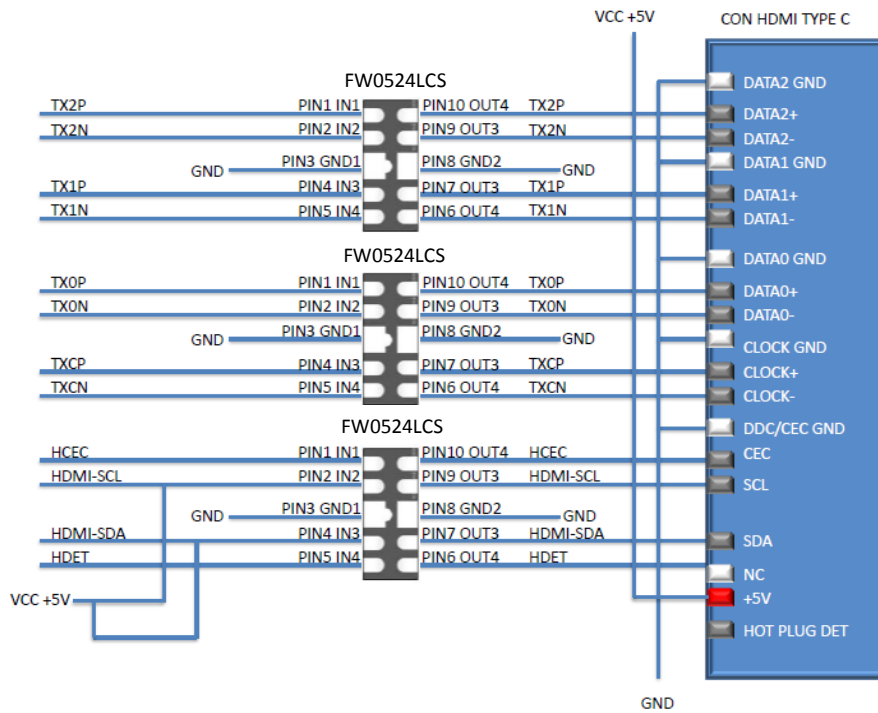


Application

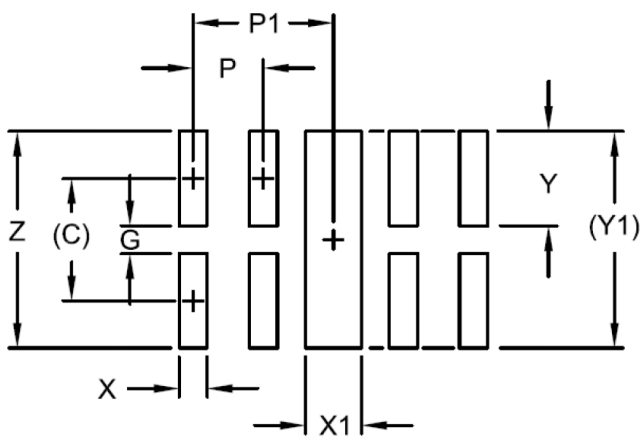
MDDI Port Protection



Application



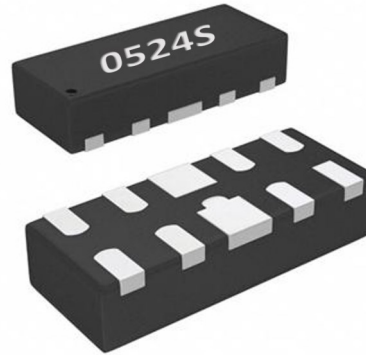
Suggested PAD Layout



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.034)	(0.875)
G	.008	0.20
P	0.20	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

Ordering Information

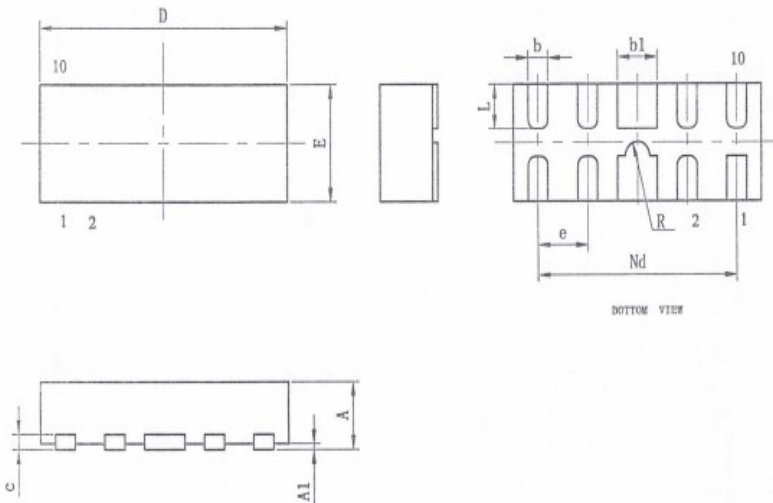
Marking code: 0524S



Tape & Reel Information

Reel size	Reels per Box	Parts per Box	Box dimensions	Shipping Weight(Max.)
			cm	Kg
7"	10	30,000	23x23x15 (10 reels)	5.8 (120k/carton)

Package Information



SYMBOL	MILLIMETER		
	MIN.	NOM.	MAX.
A	0.40	0.45	0.58
A1		0.02	0.05
b	0.15	0.20	0.25
b1	0.35	0.40	0.45
c	0.10	0.15	0.20
D	2.40	2.50	2.60
e	0.50BSC		
Nd	2.00BSC		
E	0.90	1.00	1.10
L	0.30	0.38	0.425
R	0.12	0.125	0.13



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