

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: $\pm 25\text{kV}$
Contact discharge: $\pm 20\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) :4.5A(8/20 μs)
 - ◆ ROHS Compliant
- Ref:Rclamp0524J. TCT Or RCLAMP0584J. TCT

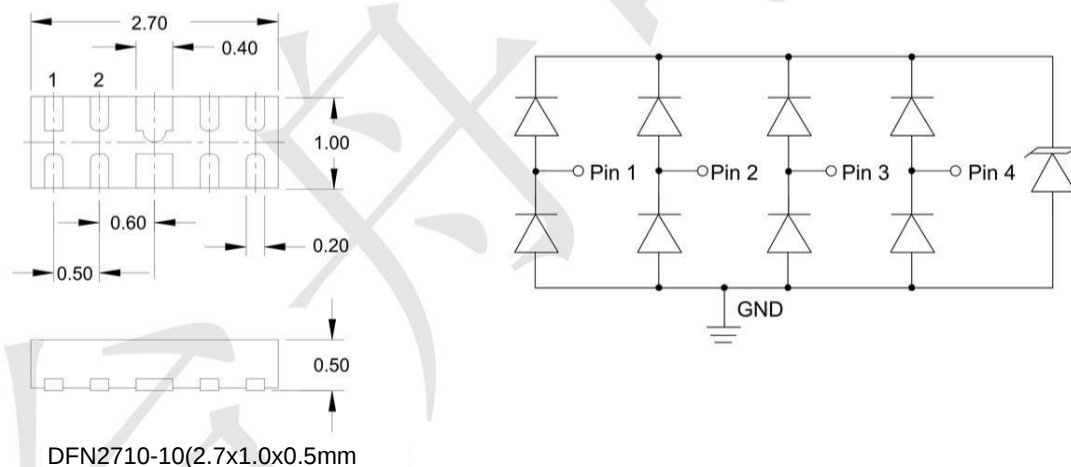
Mechanical Characteristics

- ◆ Package:DFN2710-10(2.7x1.0x0.5mm)
- ◆ 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
- ◆ Shipping Qty :3000pcs/7Inch Tape & Reel

Applications

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

Dimensions and Pin Configuration



Marking:0524J

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	120	W
Peak Pulse Current (8/20μs)	IPP	4.5	A
ESD per IEC 61000-4-2 (Air)	VESD	± 25	kV
ESD per IEC 61000-4-2 (Contact)		± 20	
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	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	Any I/O pin to ground
Breakdown Voltage	VBR	6			V	IT = 1mA, any I/O pin to ground
Reverse Leakage Current	IR			0.1	μA	VRWM = 5V, any I/O pin to ground
Clamping Voltage	VC			10	V	IPP = 1A (8 x 20μs pulse), any I/O pin to ground
Clamping Voltage	VC			15	V	IPP = 4A (8 x 20μs pulse), any I/O pin to ground
Junction Capacitance	CJ			0.8	pF	VR = 0V, f = 1MHz, any I/O pin to ground
Junction Capacitance	CJ		0.3	0.4	pF	VR = 0V, f = 1MHz, between I/O pins

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

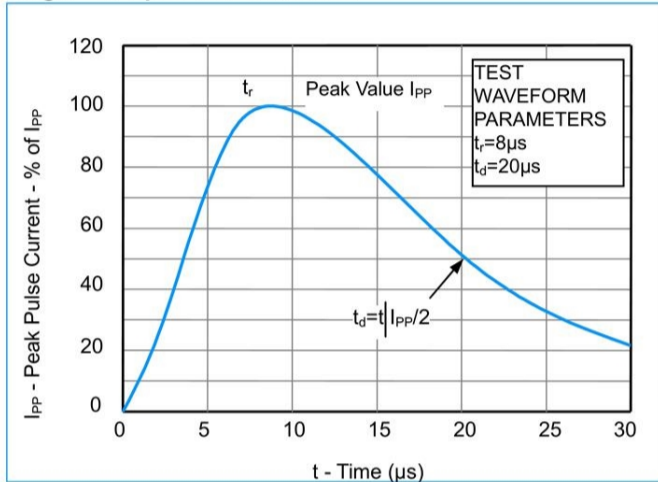


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

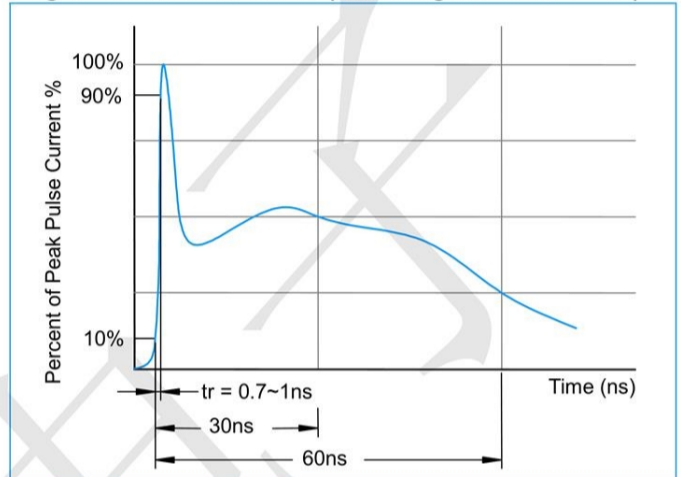
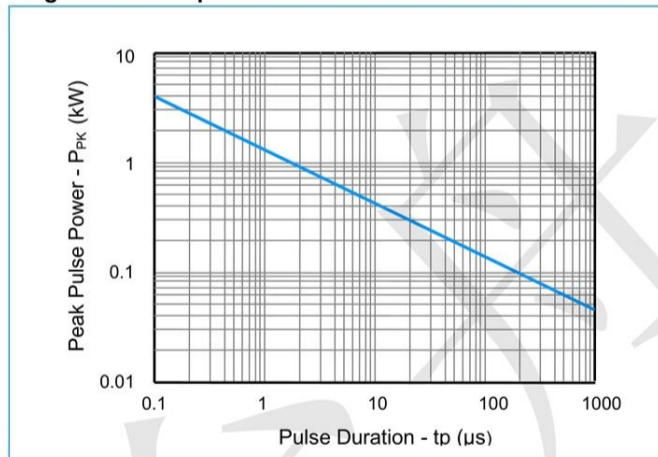
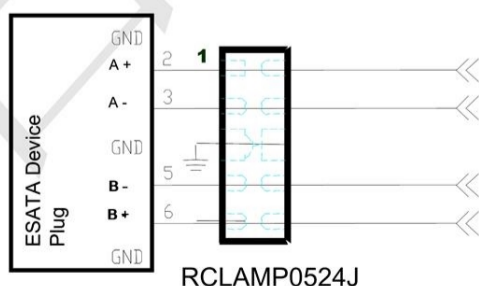
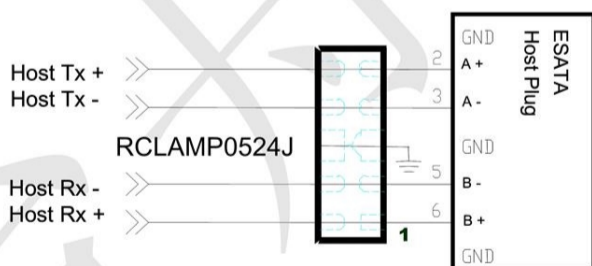
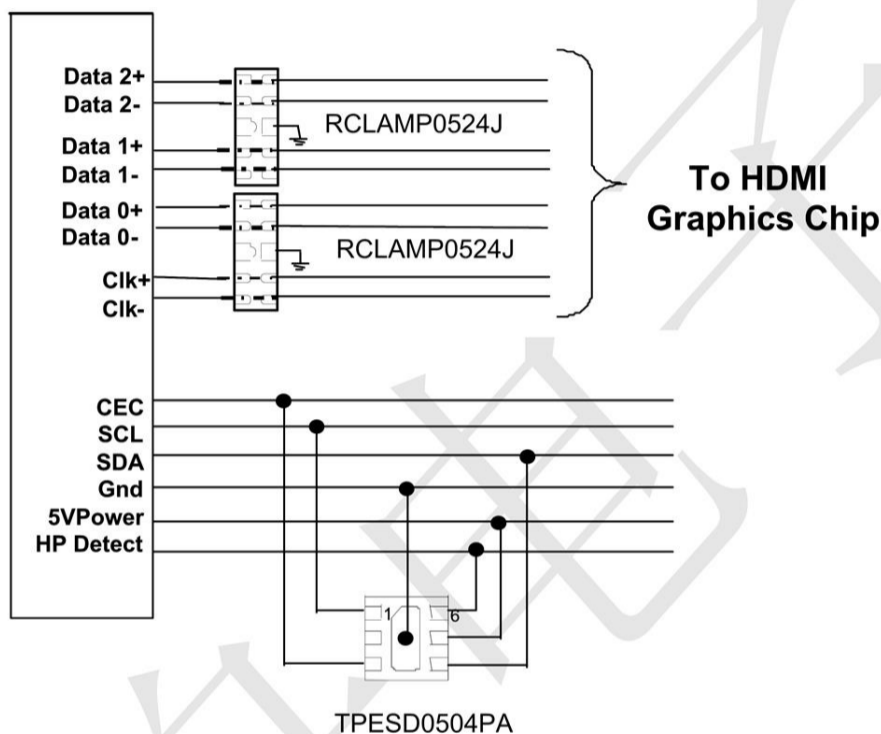
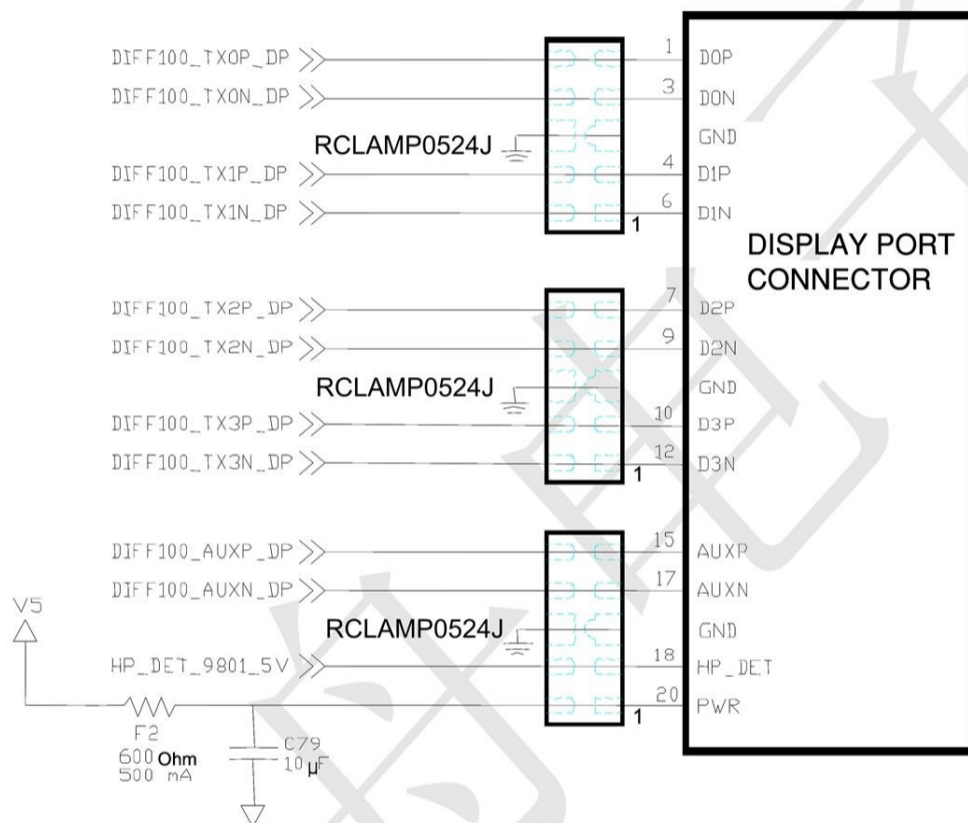


Fig3. Non - Repetitive Peak Pulse Power vs. Pulse Time

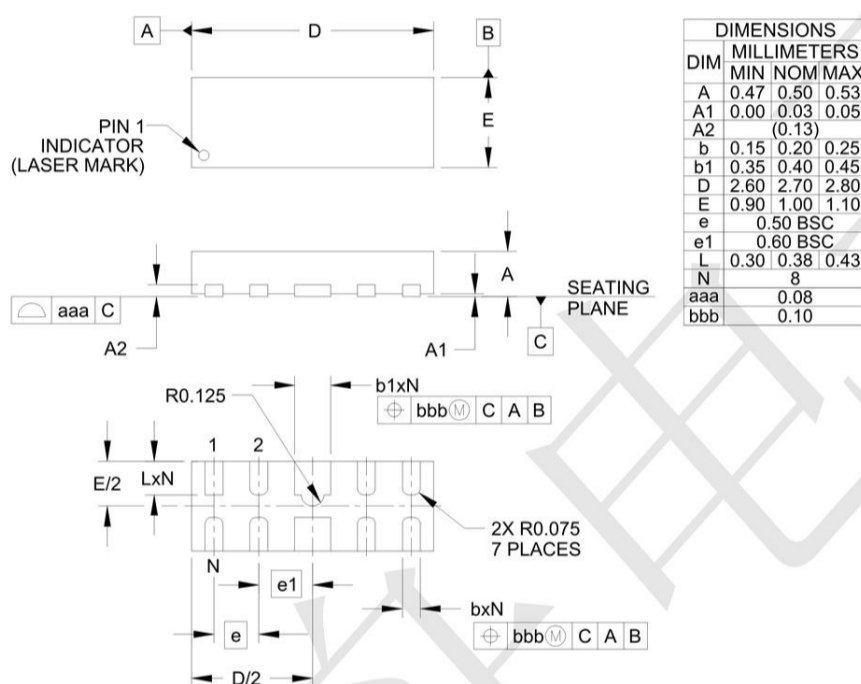


Application Information

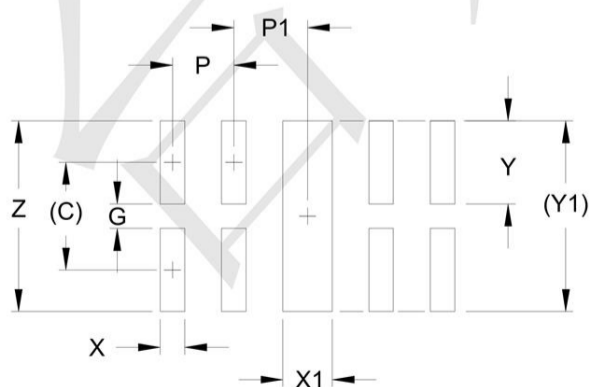




Outline Drawing - DFN2710-10



Land Pattern - DFN2710-10



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.034)	(0.875)
G	.008	0.20
P	.020	0.50
P1	.024	0.60
X	.008	0.20
X1	.016	0.40
Y	.027	0.675
Y1	(.061)	(1.55)
Z	.061	1.55