

Features

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

Mechanical Characteristics

- ◆ Package: DFN2510-10 (2.5 $\times$ 1.0 $\times$ 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

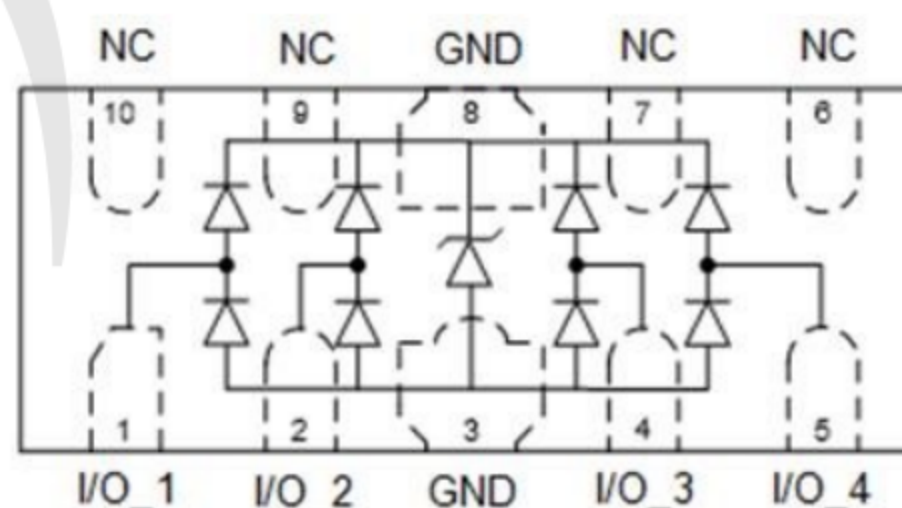
Applications

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

Ordering Information

Part Number	Qty per Reel	Reel Size
RCLAMP0524P	3000	7"

Dimensions and Pin Configuration



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

Parameter	Symbol	Value	Unit
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)		± 15	
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	6.8		9.5	V	IT = 1mA, any I/O pin to ground
Reverse Leakage Current	IR			0.08	μA	VRWM = 5V, any I/O pin to ground
Clamping Voltage	VC			17	V	Ipp = 4.5A (8 x 20μs pulse), any I/O pin to ground
Junction Capacitance	CJ		0.35		pF	VR = 0V, f = 1MHz, between I/O pins
Junction Capacitance	CJ		0.6	0.8	pF	VR = 0V, f = 1MHz, any I/O pin to ground

Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

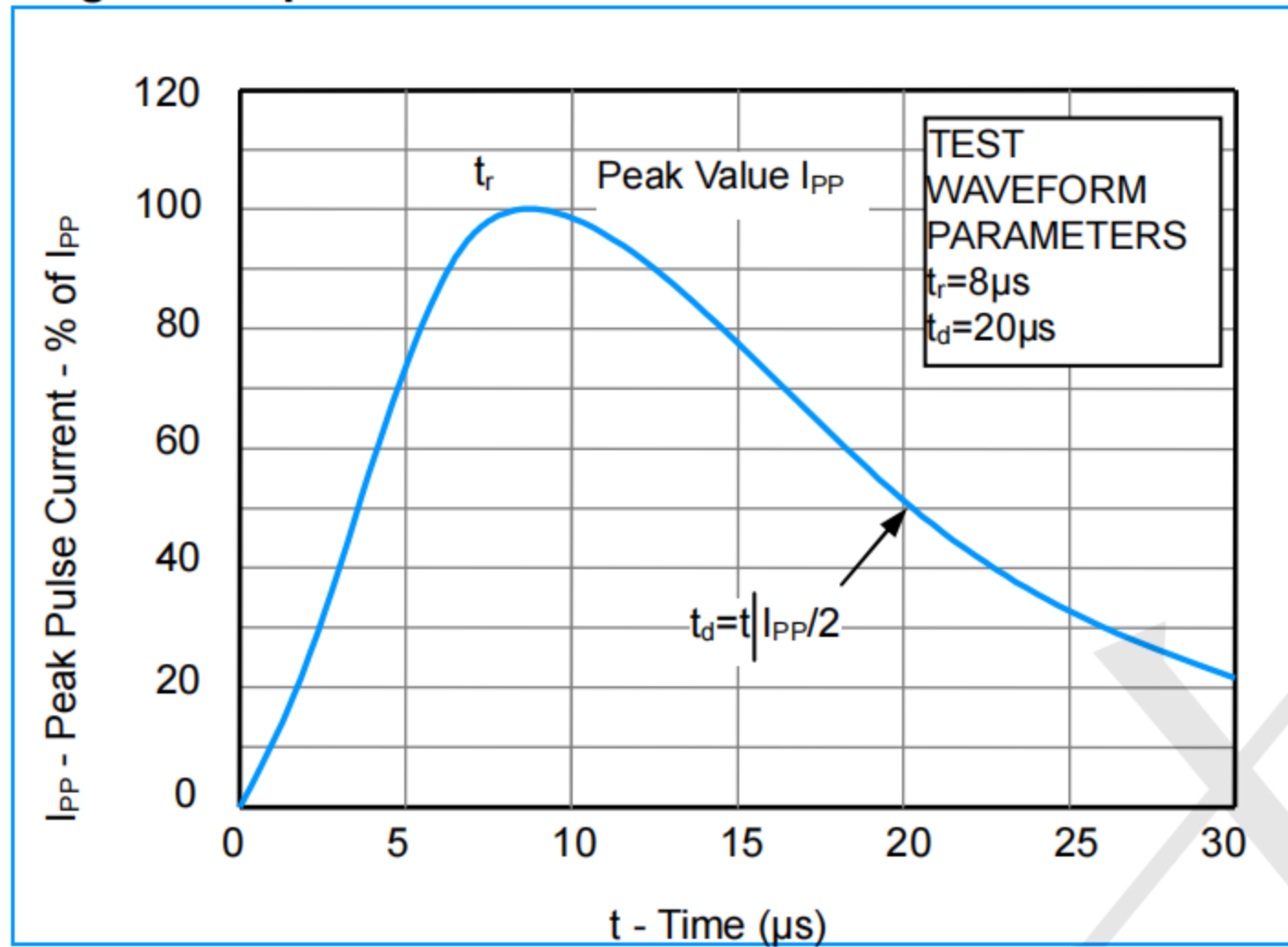


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

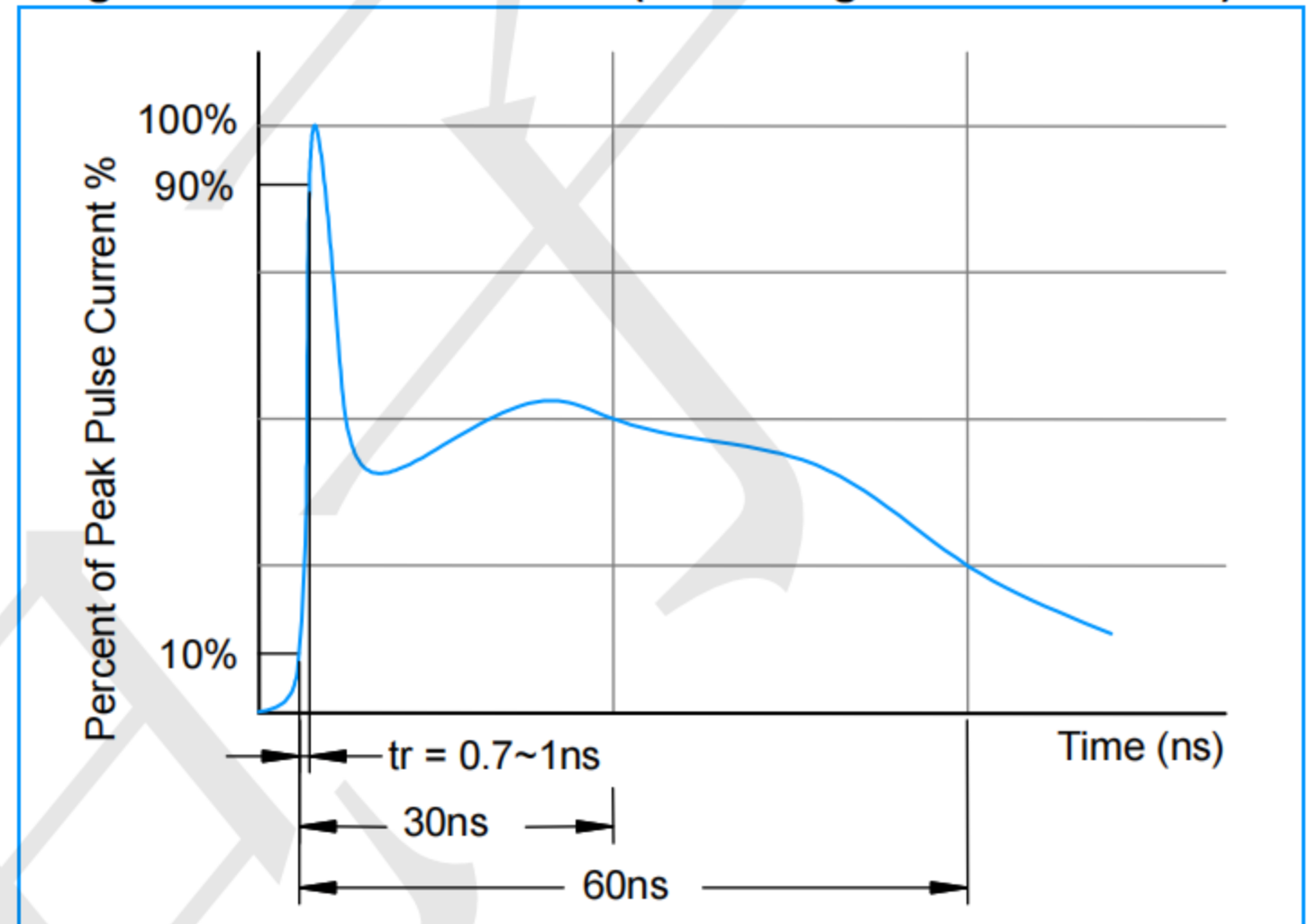
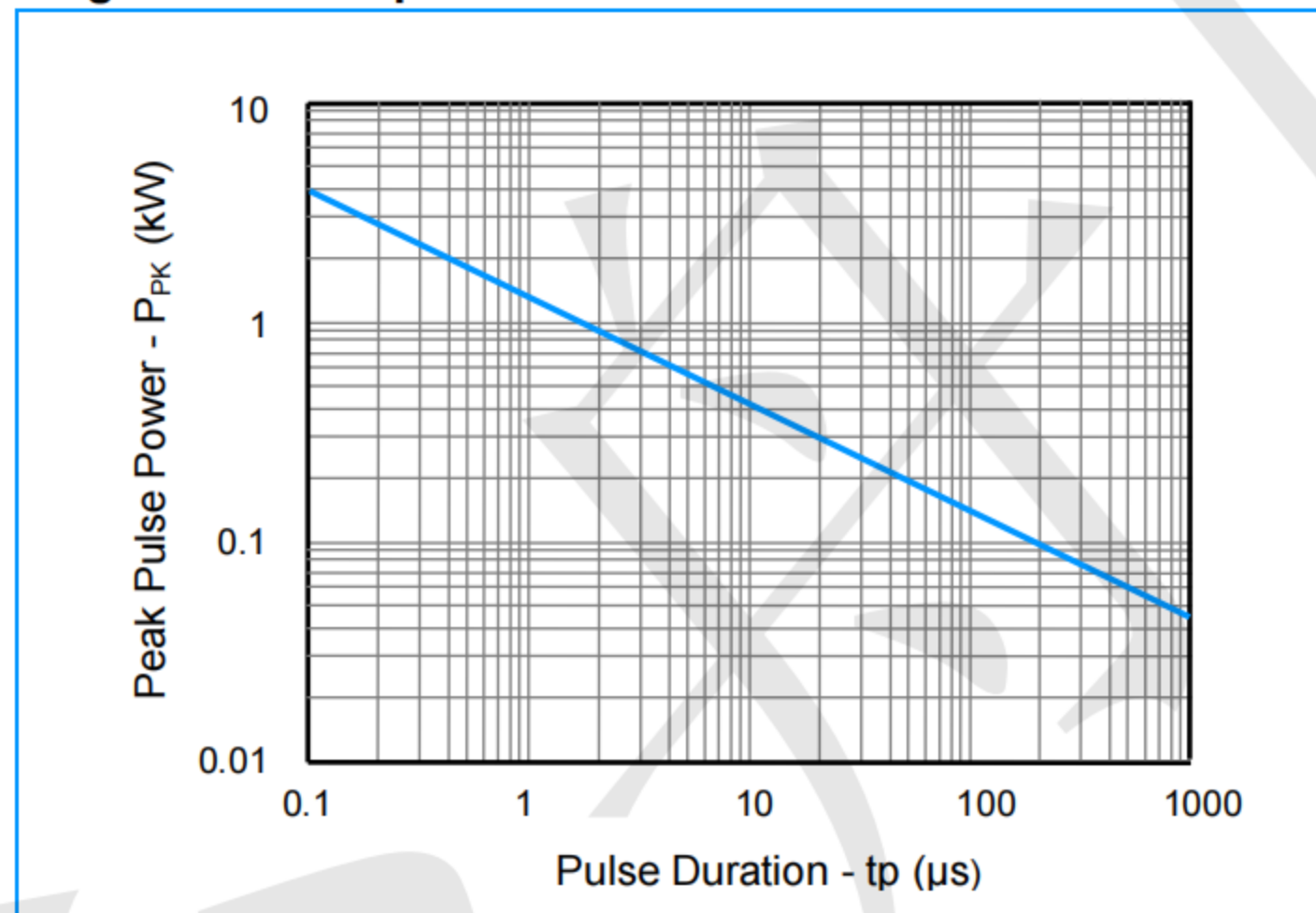
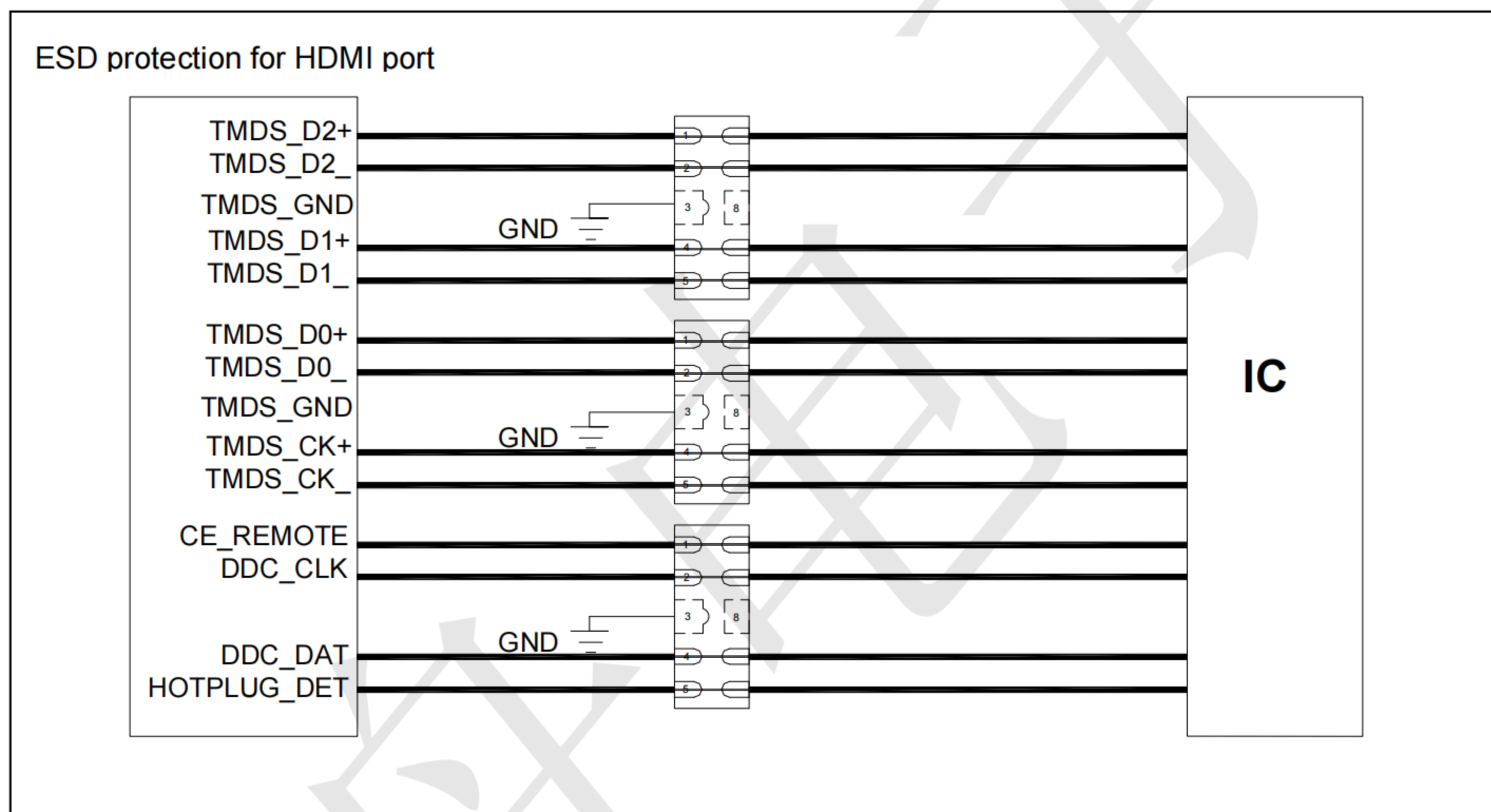


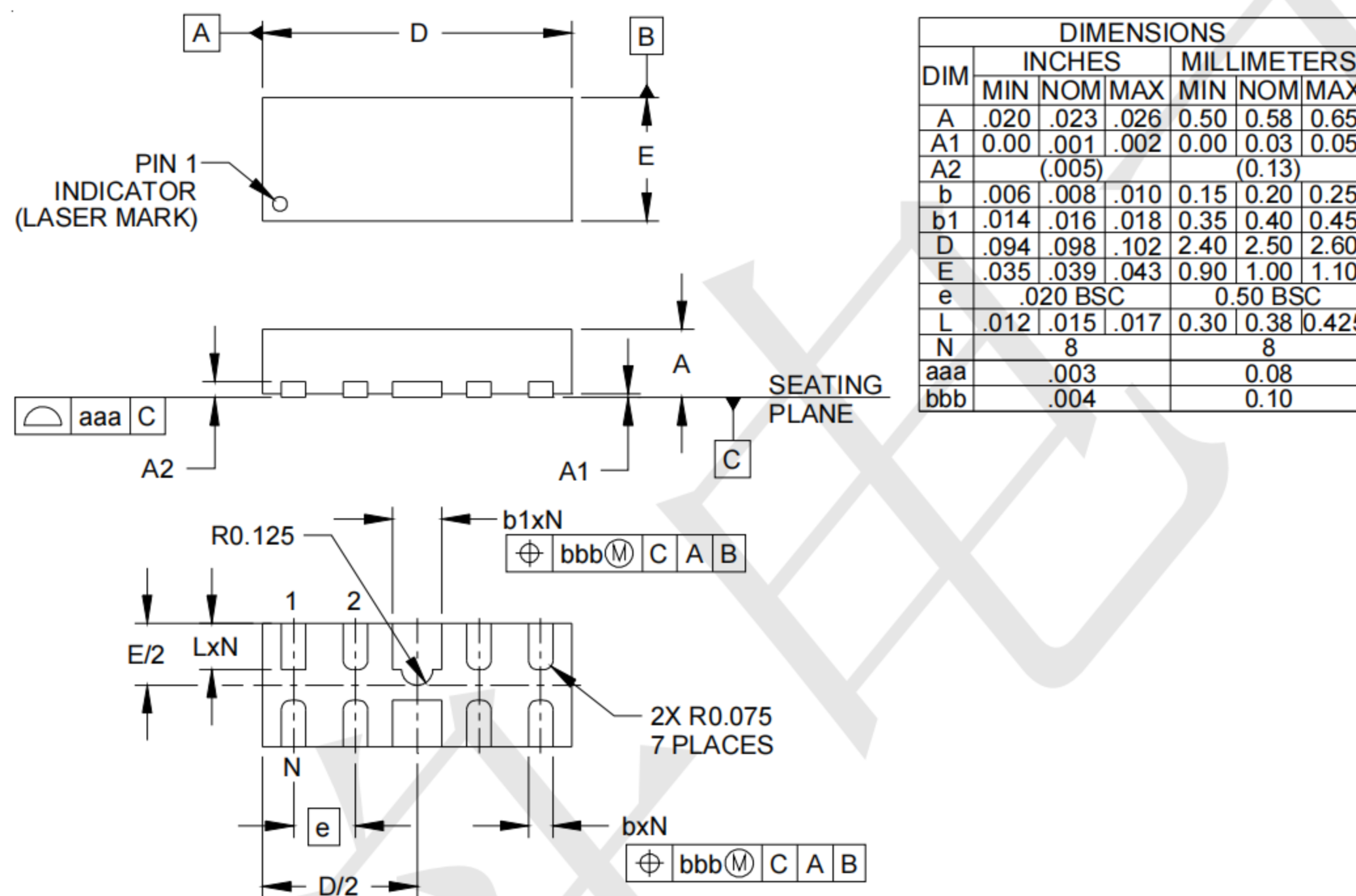
Fig3. Non - Repetitive Peak Pulse Power vs. Pulse Time



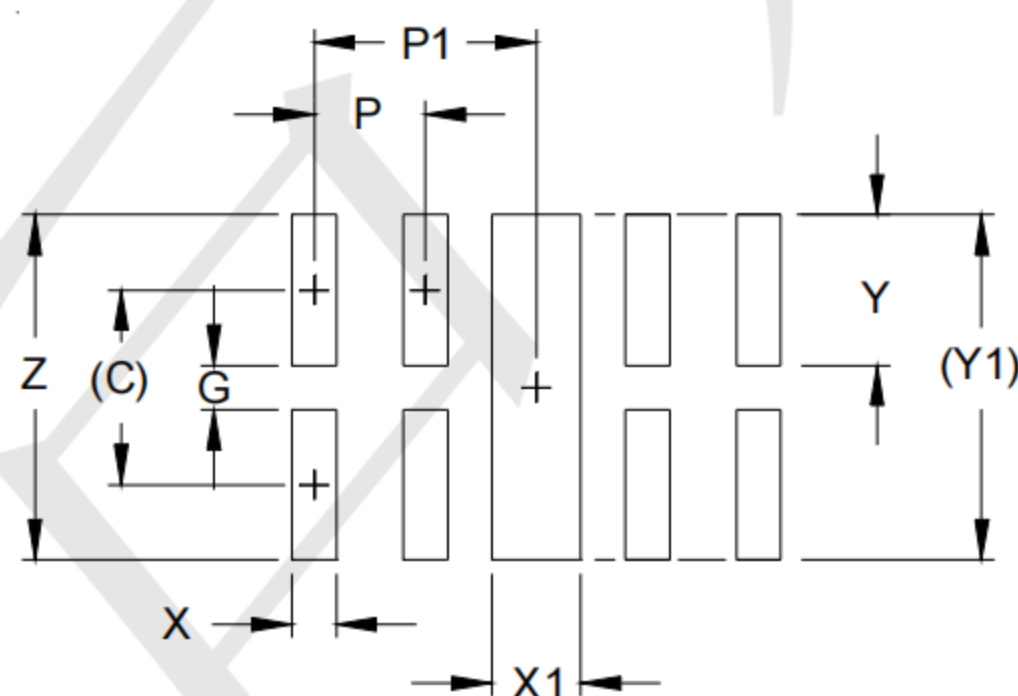
Application Information



Outline Drawing - DFN2510-10



Land Pattern - DFN2510-10



DIMENSIONS		
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