

## Features

- Low operating voltage: 5V
- Ultra low capacitance: 0.19 pF typical
- Ultra low leakage: nA level
- Low clamping voltage
- Complies with following standards:
- - IEC 61000-4-2 (ESD) immunity test  
Air discharge:  $\pm 25\text{kV}$   
Contact discharge:  $\pm 18\text{kV}$

## Mechanical Characteristics

- Package: DFN2010-5L
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

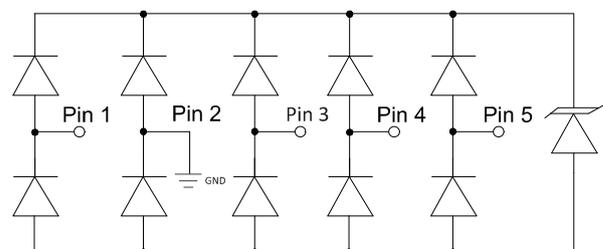
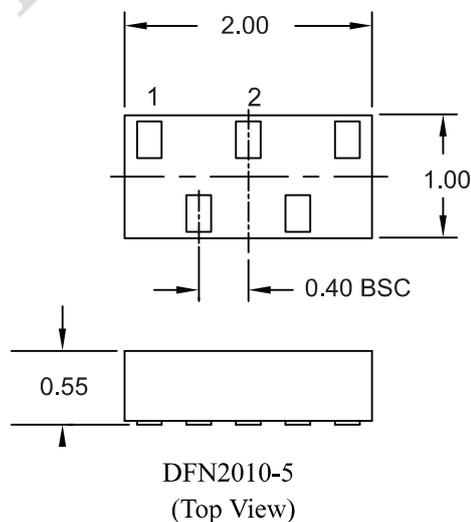
## Ordering Information

Part Number	Qty per Reel	Reel Size
TPRCLAMP0564P	3000	7"

## Applications

- Digital Visual Interfaces (DVI)
- High Definition Multi-Media Interface (HDMI 1.4/2.0)
- MDDI Ports
- Desktops, Servers and Notebooks
- Serial ATA

## Dimensions and Pin Configuration



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

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	±25	kV
ESD per IEC 61000-4-2 (Contact)		±18	
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	
Breakdown Voltage	VBR	6.8	9	11	V	IT = 1mA
Reverse Leakage Current	IR			0.07	uA	VRWM = 5V
Clamping Voltage	VC			12	V	Ipp=1A(8x 20us pulse)
Junction Capacitance	CJ		0.19	0.3	v	VR = 0V, f = 1MHz Between I/O and GND
Junction Capacitance	CJ		0.19	0.3	pF	VR = 0V, f = 1MHz Between I/O and I/O

**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**

Fig1. 8/20 $\mu\text{s}$  Pulse Waveform

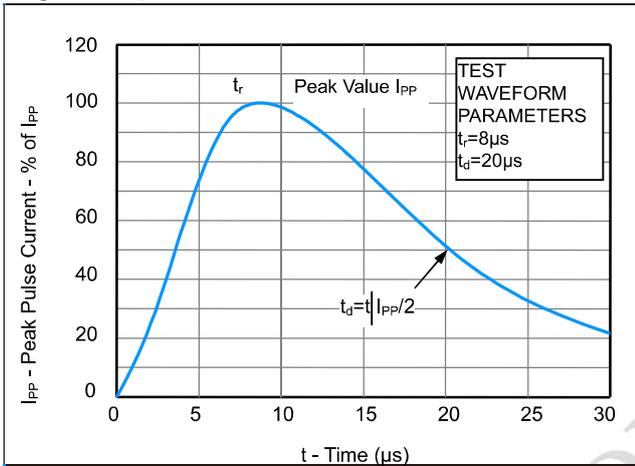


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

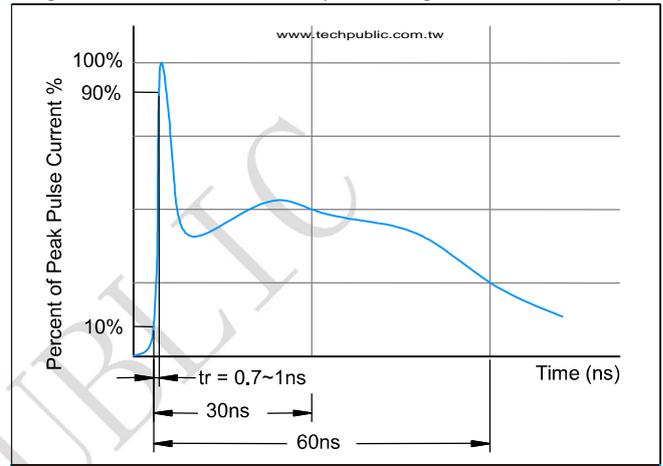
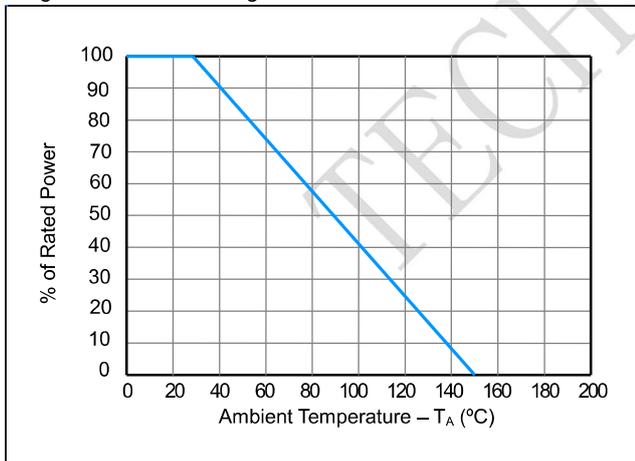
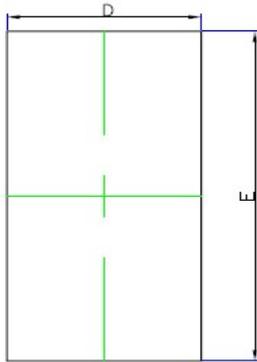


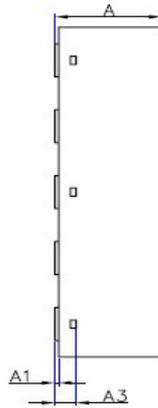
Fig3. Power Derating Curve



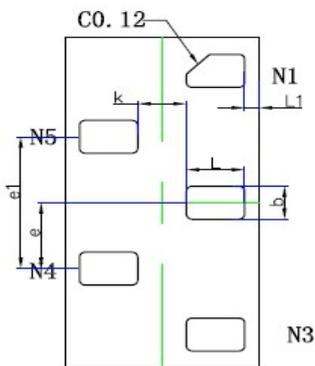
**DFN2010-5L Package Outline Drawing**



TOP VIEW



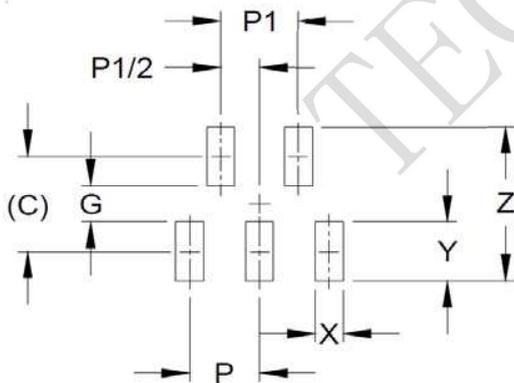
SIDE VIEW



BOTTOM VIEW

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.340	0.400	0.013	0.016
A1	-0.004	0.046	0.000	0.002
A3	0.110REF.		0.004REF.	
D	0.900	1.100	0.035	0.043
E	1.900	2.100	0.075	0.083
k	0.250REF.		0.010REF.	
b	0.150	0.250	0.006	0.010
e	0.400BSC.		0.016BSC.	
e1	0.800BSC.		0.031BSC.	
L	0.224	0.376	0.009	0.015
L1	0.075REF.		0.003REF.	

**Suggested Land Pattern**



DIMENSIONS	
DIM	MILLIMETERS
C	(0.65)
G	0.25
P	0.45
P1	0.50
X	0.18
Y	0.40
Z	1.05