

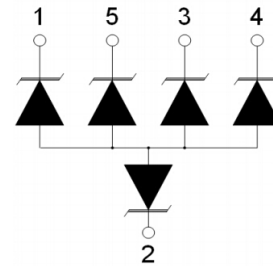
Features

- 60 Watts peak pulse power ($t_p = 8/20\mu s$)
- Transient protection for high speed data lines to
IEC 61000-4-2 (ESD) $\pm 20kV$ (air), $\pm 15kV$ (contact)
IEC 61000-4-4 (EFT) 40A (5/50ns)
- Working voltages: 5V
- Protects five I/O lines
- Ultra Low capacitance: 0.3pf (typical between I/O channel)
- Low operating and clamping voltages
- Solid-state silicon avalanche technology

Dimensions DFN2010-5



Pin Configuration



Applications

- High Definition Multi-Media Interface (HDMI)
- USB 1.1/2.0/3.0/OTG
- IEEE 1394 Firewire Ports
- Projection TV Monitors and Flat Panel Displays
- Notebook Computers
- Set Top Box

Mechanical Characteristics

- Package: DFN2010P5
- Quantity Per Reel: 3,000pc
- Reel Size: 7 inch
- Device Marking: 4R2N

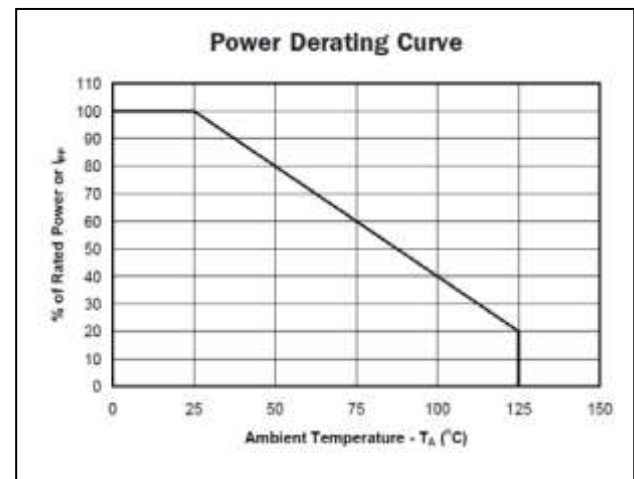
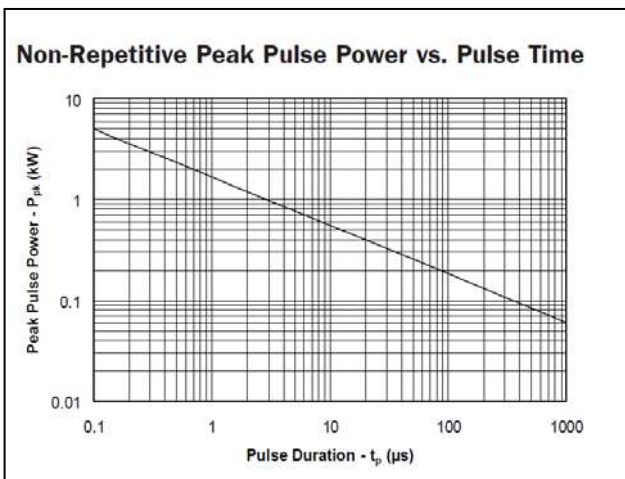
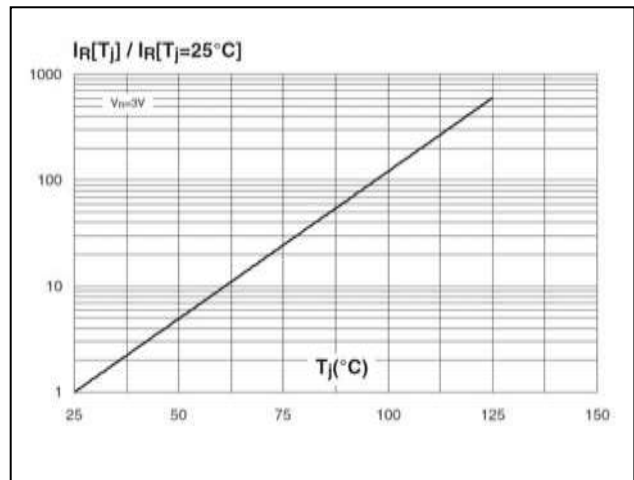
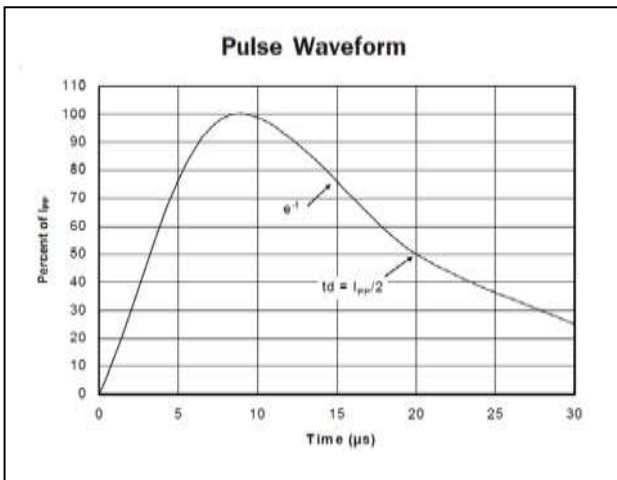
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	60	W
Peak Pulse Current (8/20 μs)	IPP	3	A
ESD per IEC 61000-4-2 (Air)	VESD	± 20	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

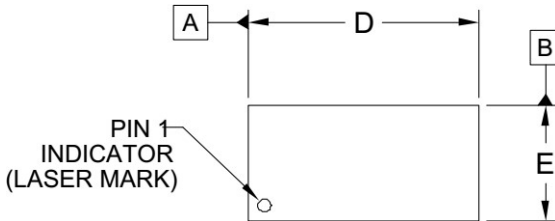
Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, I/O-GND	6.0	6.5	7.5	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$, I/O-I/O	6.0	6.5	7.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$			0.1	μA
Clamping Voltage	V_C	$I_{PP} = 3\text{A}$ (8 / 20 μs pulse), I/O-GND		15	20	V
Clamping Voltage	V_C	$I_{PP} = 3\text{A}$ (8 / 20 μs pulse), I/O-I/O		15	20	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-GND		0.2	0.3	pF
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$, I/O-I/O		0.2	0.3	pF

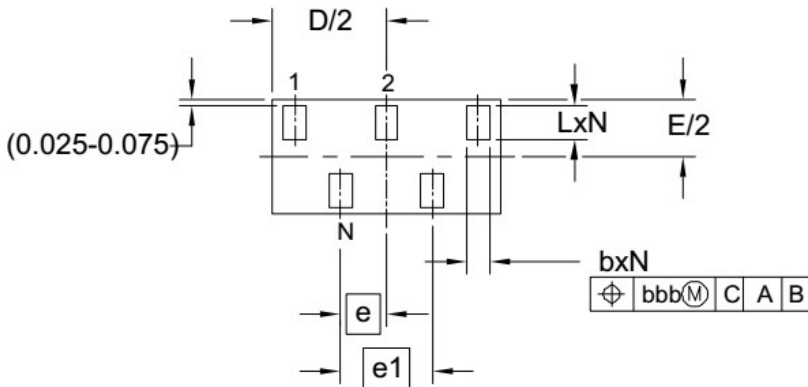
Characteristic Curves



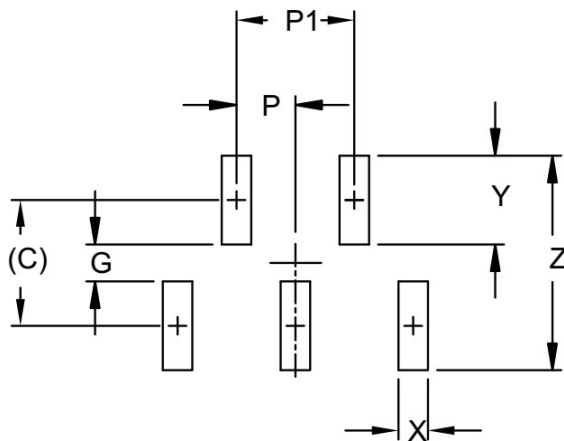
DFN2010P5 PACKAGE OUTLINE & DIMENSIONS



DIMENSIONS			
DIM	MILLIMETERS		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.15	0.20	0.25
D	1.95	2.00	2.08
E	0.95	1.00	1.08
e	0.40 BSC		
e1	0.80 BSC		
L	0.25	0.30	0.35
N	5		
aaa	0.08		
bbb	0.10		



Suggested Land Pattern



DIMENSIONS	
DIM	MILLIMETERS
C	(0.85)
G	0.25
P	0.40
P1	0.80
X	0.20
Y	0.60
Z	1.45