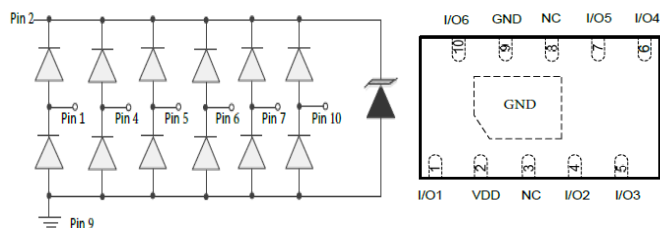
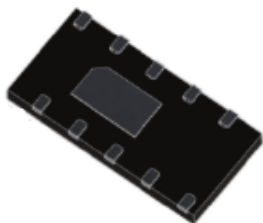


DFN4120

Features

- 30Watts peak pulse power($t_p=8/20\mu s$)
- Protect up to 6-lines
- Low clamping voltage
- Low leakage current
- Glass passivated junction
- Unidirectional configurations
- IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
- Halogen free and RoHS compliant

Mechanical Data

- CASE: DFN4120 Molded Plastic
- Molding compound flammability rating: UL 94V-0
- Mounting Position:Any

Making Code & Ordering information

U5U

Ordercode	Package	Base qty	Deliverymode
PDF10U05A6	DFN4120	3000	Tape and reel

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{pp}	30	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)(note1)	I_{pp}	3	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	15 8	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to +125	°C
Storage Temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0	7.5	9.5	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^\circ C$		0.1	0.5	μA
Peak Pulse Current	I_{pp}	$t_p=8/20\mu s$			3	A
Clamping Voltage	V_C	$I_{PP}=3.0A, t_p=8/20\mu s$		10	15	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$ I/O to I/O		0.2	0.3	pF
		$V_R = 0V, f = 1MHz$ I/O to GND		0.3	0.4	pF

Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

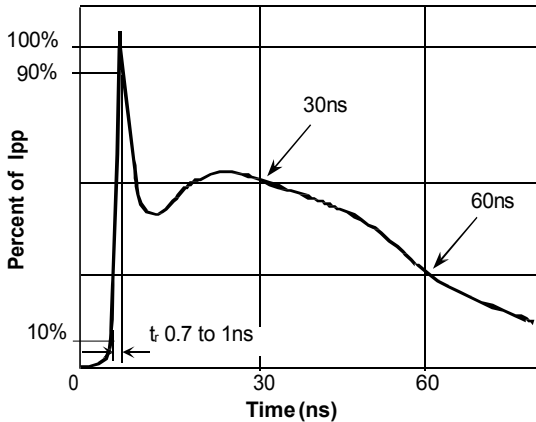


Fig.1 IEC61000-4-2 Waveform

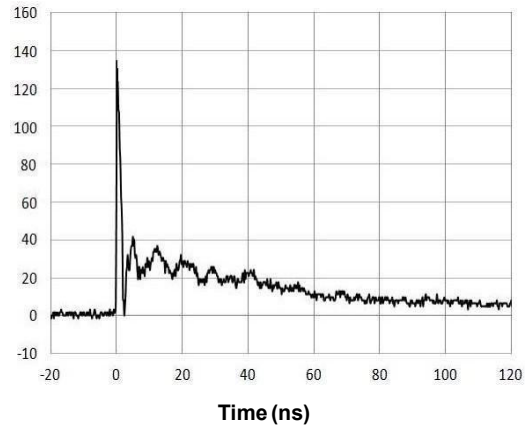


Fig.2 IEC61000-4-2 +8kV ContactESD Clamping Waveform

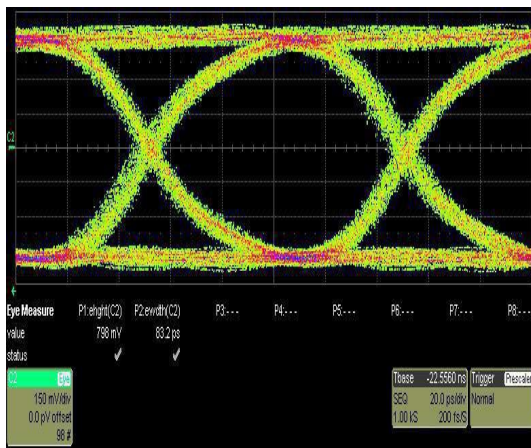


Fig.3 Eye Diagram - USB3.1 at 10Gbps per channel

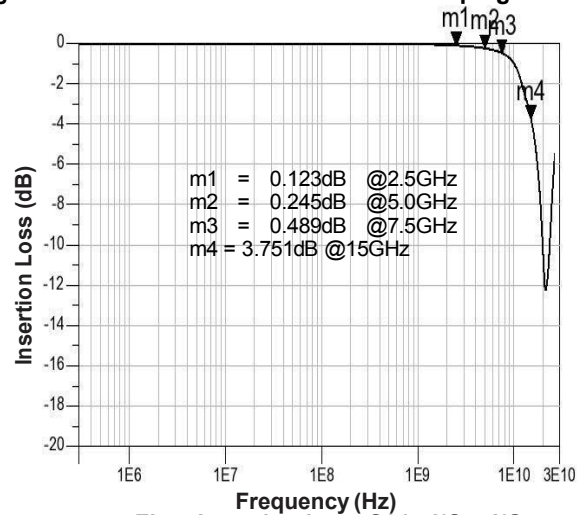
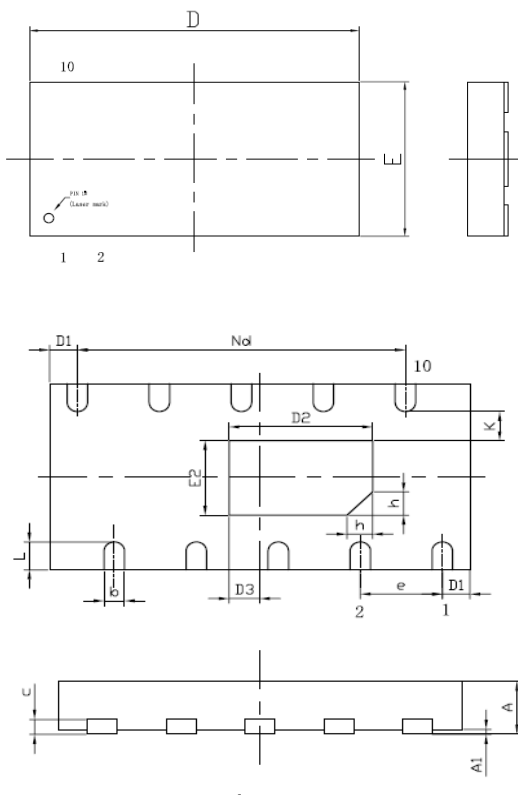


Fig.4 Insertion Loss S21 - I/O to I/O

Package Outline Dimensions: DFN4120



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	—	0.02	0.05
b	0.15	0.20	0.25
c	0.10	0.15	0.20
D	4.00	4.10	4.20
D1	0.20	0.25	0.30
D2	1.30	1.40	1.50
D3	0.25	0.30	0.35
e	0.80BSC		
Nd	3.20BSC		
E	1.90	2.00	2.10
E2	0.70	0.80	0.90
K	0.20	—	—
L	0.25	0.30	0.35
h	0.15	0.20	0.25
L/P载体尺寸 (MIL)	67*43		