

Applications

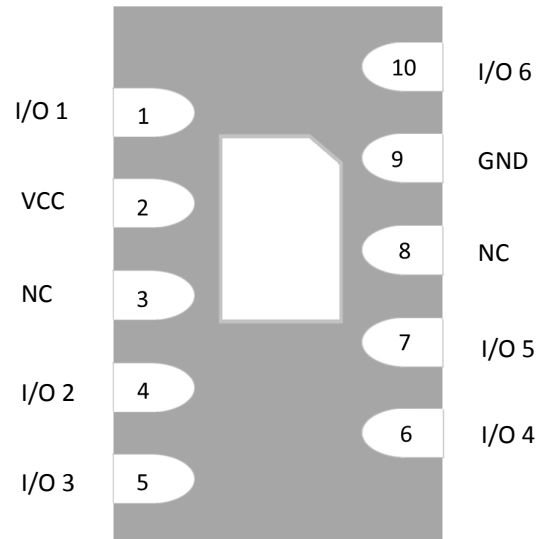
- Personal Digital Assistance
- Wireless System
- HDMI 1.4
- High Speed Data Line
- Ethernet
- USB 3.0 Power and Data line Protection

Feature

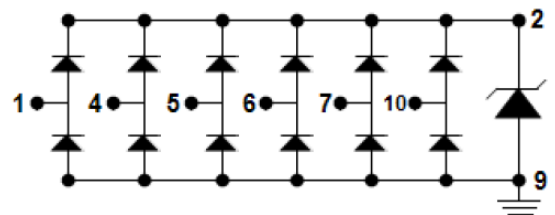
- With TVS Diode
- ESD Protection:Level 4
- Low clamping voltage
- 150 Watts peak pulse power per line(tp=8/20uS)
- Ultra low capacitance:0.3pf max.(any I/O to GND.)
- Protection 6 lines I/O port

IEC Compatibility

- EN61000-4
- 61000-4-2(ESD):Level 4,Contact:>±8kv,Air:>±15kv
- 61000-4-4(EFT):40A-5/50ns
- 61000-4-5(Surge):5A,8/20us



DFN4120-10L



Mechanical Characteristics

- Molded JEDEC DFN4120 package
- Packing:Tape and Reel
- Flammability rating UL 94V-0
- Halgen Free

Device Characteristics

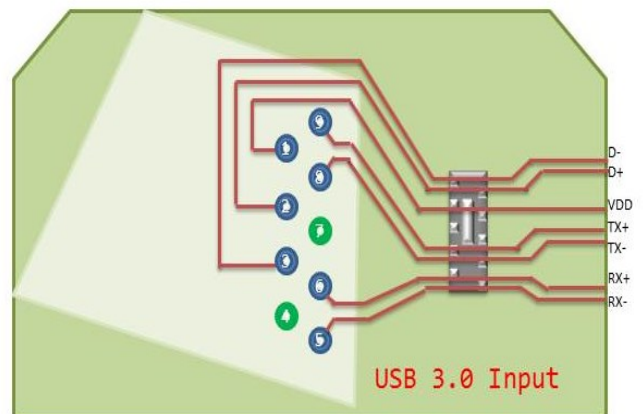
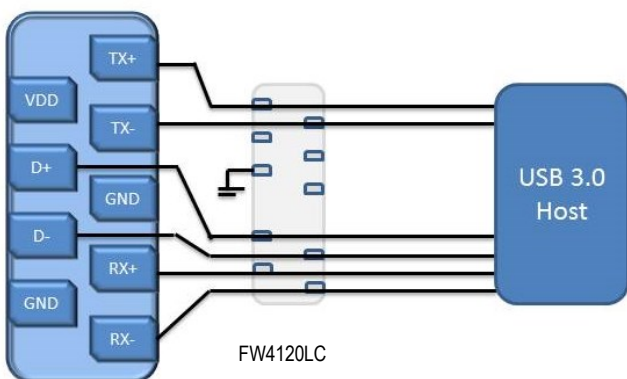
Maximum Ratings@25 unless otherwise specified			
Parameter	Symbol	Value	Units
Peak pulse power (tp=8/20us) see fig 1.	PPP	150	Watts
Operating Temperature	TJ	-55~150	°C
Storage Temperature	TSTG	-55~150	°C

Electrical Characteristics

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	VRWM	Pin 2 to 9			5	V
Reverse Breakdown Voltage	VBR	I _Z =1mA Pin 2 to 9	6.1		8.5	V
Reverse Leakage Current	I _{R@VR=5V}	Any I/O Pins to GND.			0.9	uA
Forward Voltage	V _F	I _F =15mA GND to any I/O Pins			1.15	V
Clamping Voltage	V _C	I _{PP} =1A t _p =8/20us I _{PP} =5A t _p =8/20us			15 28	V
Junction Capacitance	C I/O-I/O	V _{dc} =0V, f=1MHZ		0.3		pf

Application

USB3.0 protection for super high speed signals



Rating and characteristic curve

FIGURE 1
Non-repetitive Peak pulse power V.S pulse time

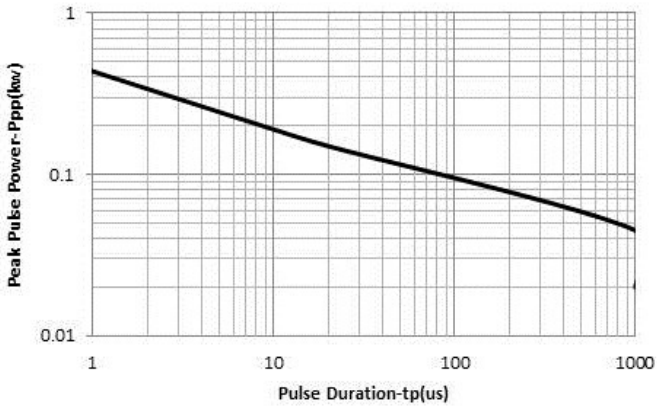


FIGURE 2
PULSE WAVE FORM

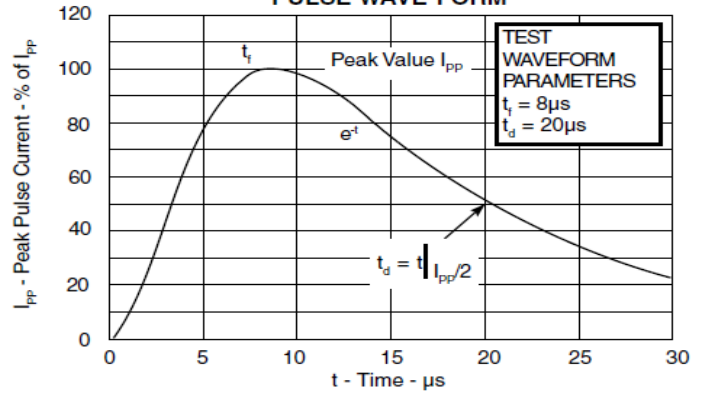


FIGURE 3
Power Derating Curve

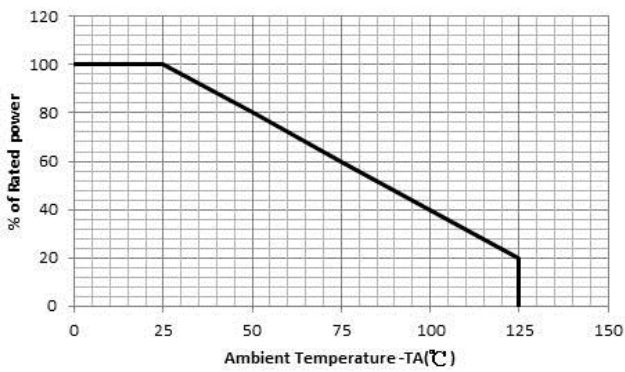


FIGURE 4
Forward Voltage VF Map Pin2 to I/O pins

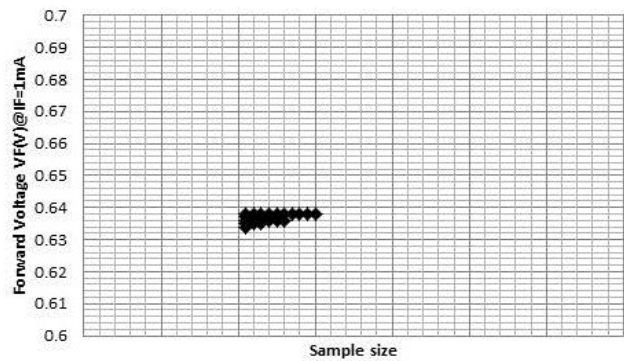
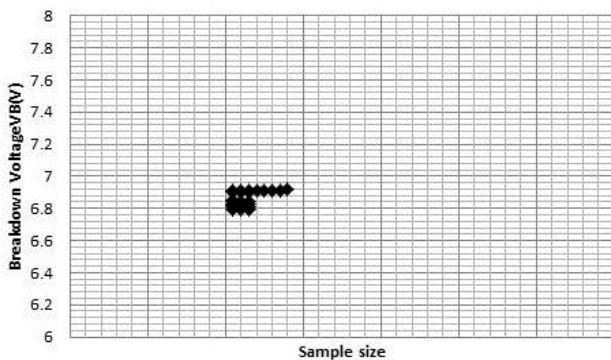


FIGURE 5
Breakdown Voltage VB Map Pin 2 to 9

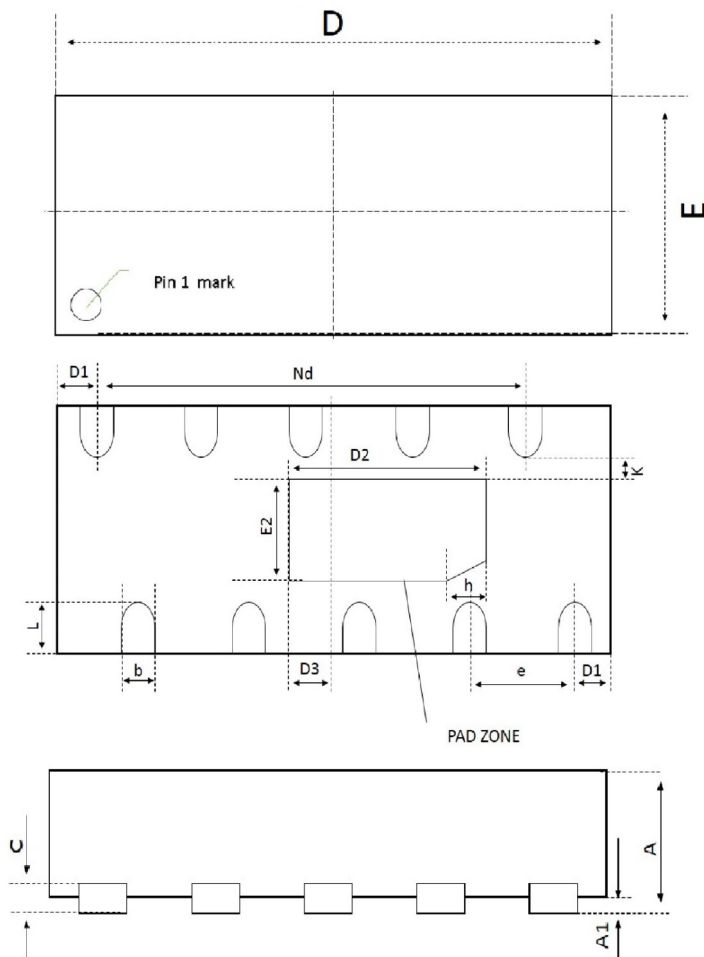


Ordering information

Marking code



Package information



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/F Carrier	67*43		

Tape & Reel Information

Part No.	Material	Type	Reel size	MOQ
FW4120LC	Green	T/R	13 inch	6,000 pcs



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