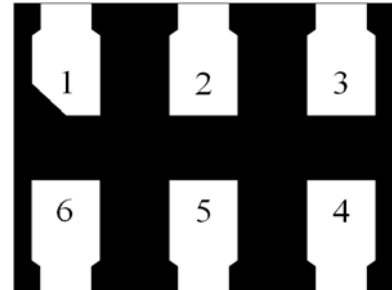


Features

- 90 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- Protects Two High Speed Lines
- Low Clamping Voltage
- RoHS Compliant
- IEC61000-4-2 (ESD) $\pm 17kV$ (air), $\pm 15kV$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (LIGHTNING) 3A (8/20 μs)

Dimensions DFN1109MP6



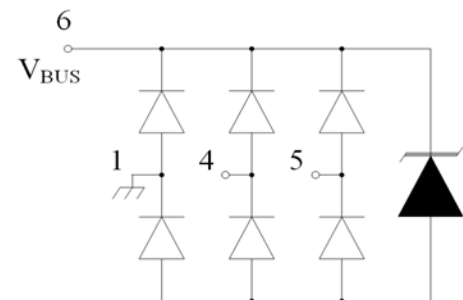
Applications

- USB 3.0 / USB 3.1 Interfaces
- HDMI 1.4 / HDMI 2.0 Interfaces
- Video Graphics Cards
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Industrial Controls
- Peripherals

Mechanical Characteristics

- DFN1109TP6 (1.1x0.9mm) Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 1.0 Milligrams (Approximate)
- Quantity Per Reel : 3,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

Pin Configuration



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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	90	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 17	Kv
ESD per IEC 61000-4-2 (Contact)		± 15	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @5A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
ULC051109P6	UM1A	5	6	1	18	30	3	0.1	0.25

TYPIC CHARACTERISTICS

Figure 1. 8 x 20 μ s Waveform

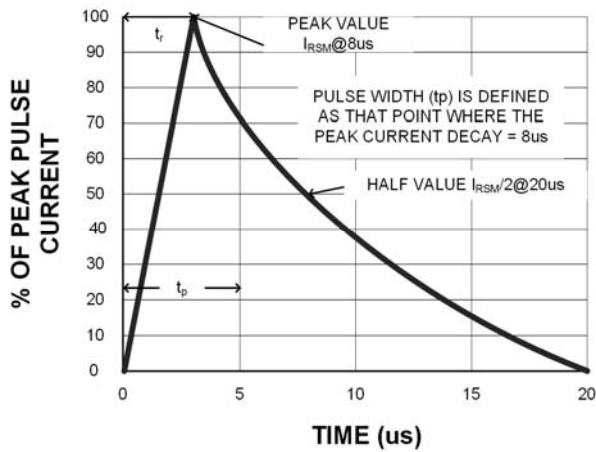


Figure 2. Power Derating Curve

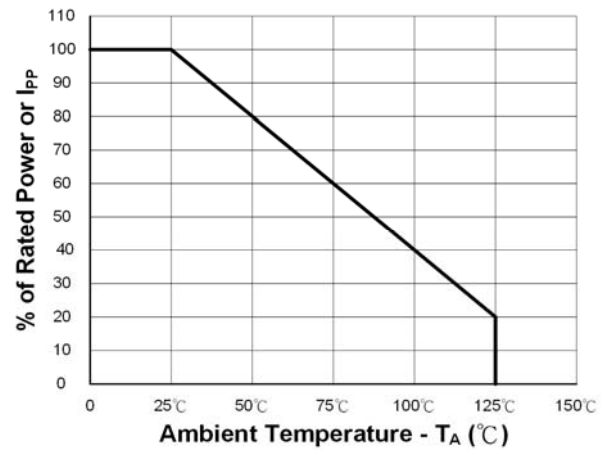


Figure 3. Clamping Voltage vs. Peak Pulse Current ($t_p=8/20\mu s$)

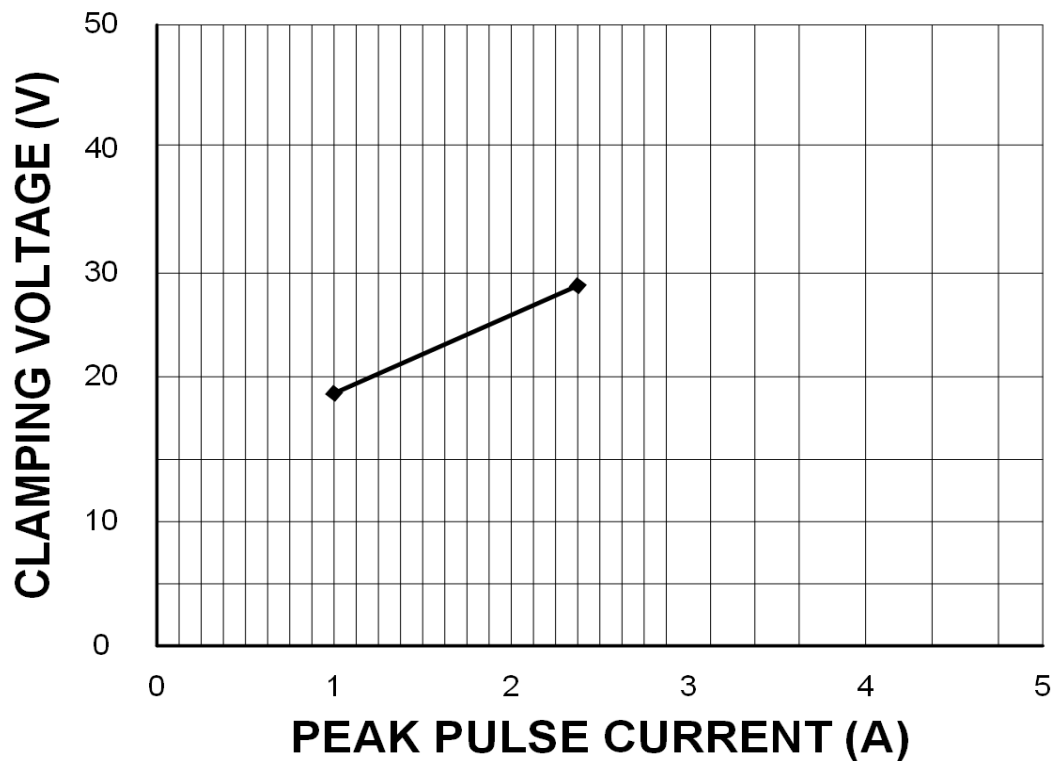


Figure 4. Typic Capacitance vs. Reverse Voltage

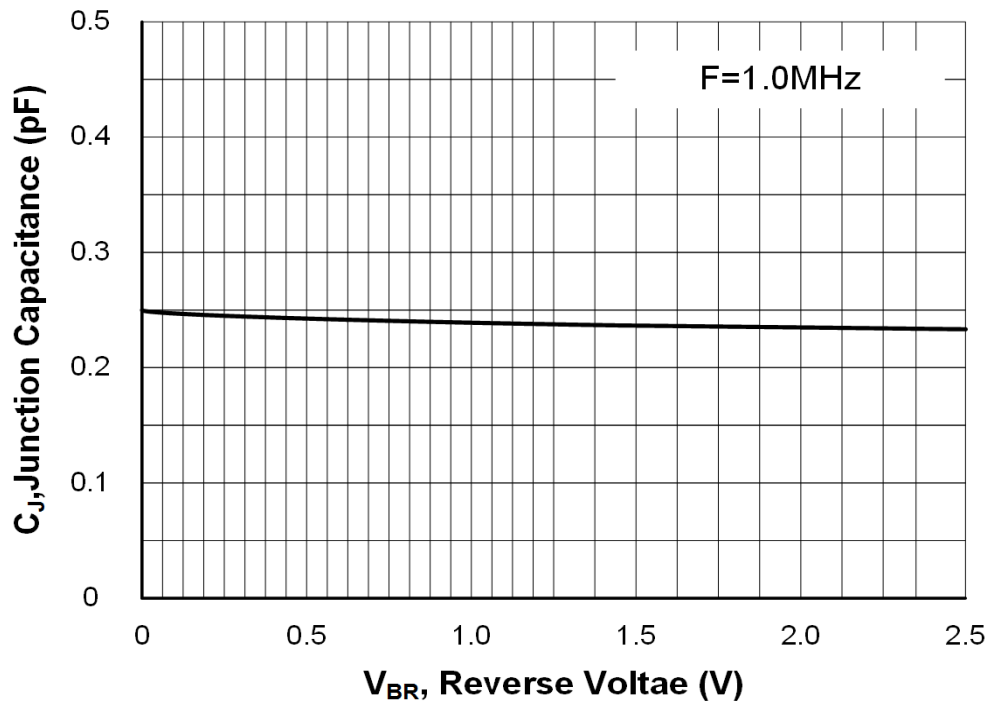
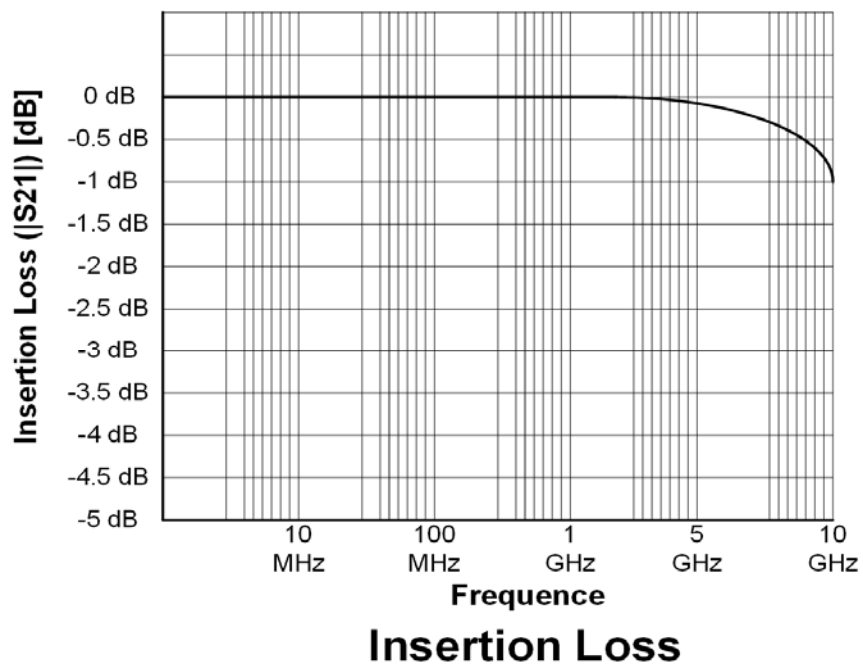


Figure 5. Typic Insertion Loss vs. Frequence



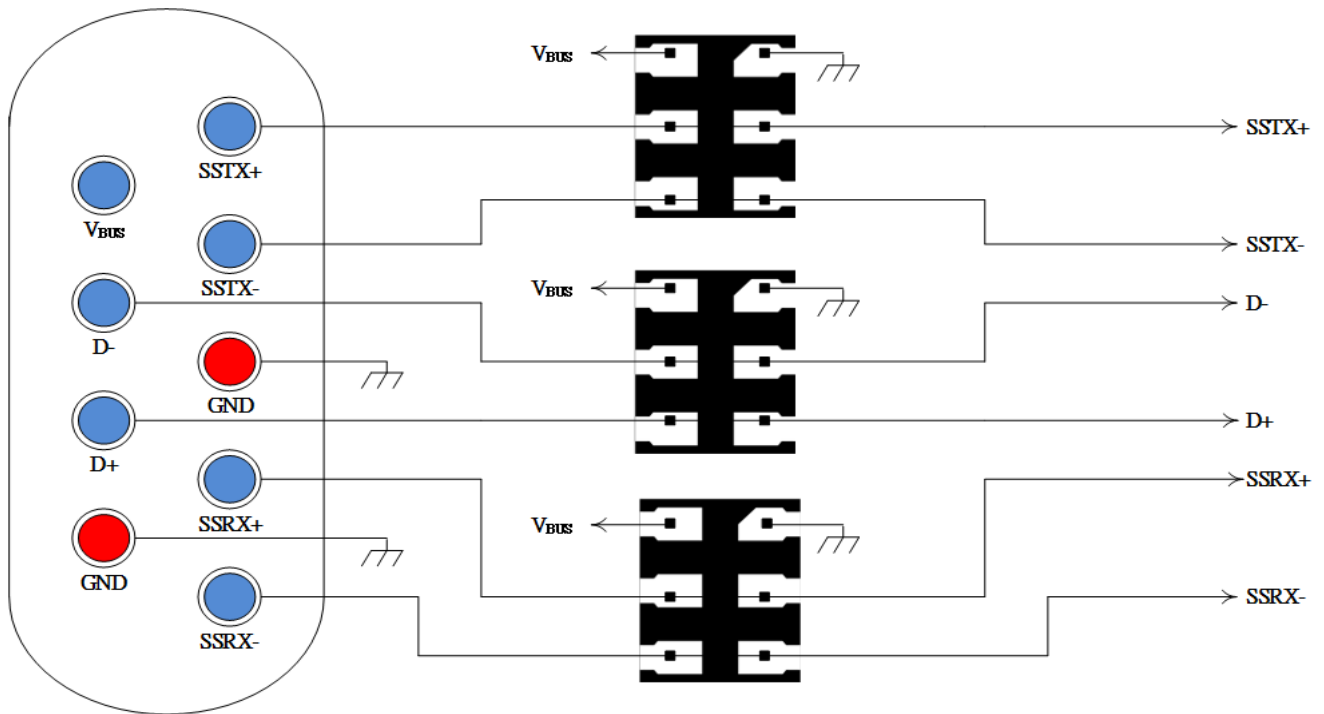
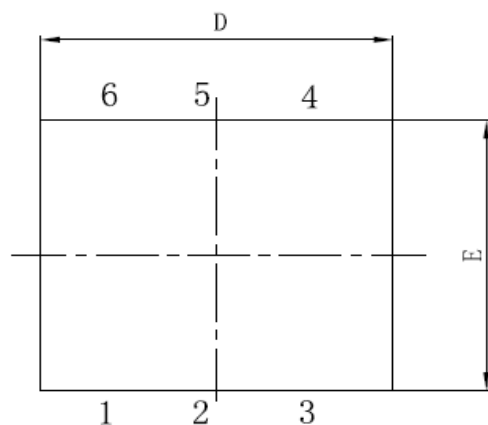
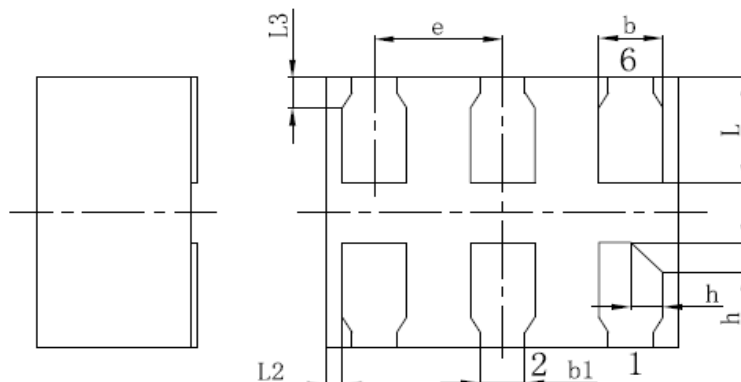


Figure 1. USB 3.0 Protection

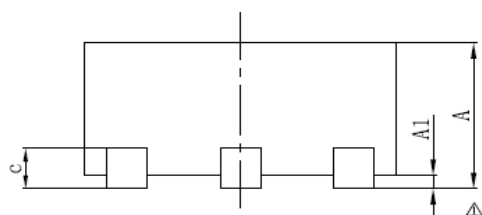
DFN1109MP6 PACKAGE OUTLINE & DIMENSIONS



TOP VIEW



BOTTOM VIEW



SIDE VIEW

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.15	0.20	0.25
b1	0.14REF		
c	0.10	0.152	0.20
D	1.05	1.10	1.15
e	0.40BSC		
E	0.85	0.90	0.95
L	0.30	0.35	0.40
L2	0.05REF		
L3	0.10REF		
h	0.05	0.10	0.15