

ME5V0U4UAGL

1. Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- Solid-state silicon-avalanche technology
- Capacitance: 0.65pF Max
- Low clamping voltage
- Low leakage current
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test Air discharge: $\pm 15KV$ Contact discharge: $\pm 15KV$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5(Lightning) 6A (8/20us)

2. Application

- HDMI 1.3, HDMI1.4, HDMI2.0
- USB1.1/2.0/3.0/3.1OTG
- Digital Visual Interface (DVI)
- Serial ATA
- Ethernet port 10/100/1000 M

3. Mechanical Data

- Package: DFN2510
- UL Flammability Classification Rating 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4. Absolute Maximum Rating

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 15	KV
ESD per IEC 61000-4-2 (Air)		± 15	
Peak Pulse Power(8/20 μs)	P_{PP}	60	W
Reverse Working Voltage	V_{RWM}	5.0	V
Peak Pulse Current	I_{PP}	6	A
Operating Temperature	T_{OPT}	-55~+125	°C
Storage Temperature	T_{stg}	-55~+150	°C

5. Pinning information

Pin	Polarity	Simplified outline	Equivalent Circuit	Marking	Package
10	Uni			5LN11	DFN2510

6. Electrical Characteristics (Tamb=25°C)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5.0V$			0.1	μA
Forward Voltage	V_F	$I_F=15mA$		0.9	1.2	V
Clamping Voltage	V_C	$I_{pp}=1A, t_p=8/20\mu s$		6.5		V
Clamping Voltage	V_C	$I_{pp}=6A, t_p=8/20\mu s$		8	10	V
Junction Capacitance(IO-GND)	C_J	$V_R=2.5V, f=1MHz$			0.65	pF
Junction Capacitance(IO-IO)	C_J	$V_R=0V, f=1MHz$			0.45	pF

7. Electrical Parameters

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage@ I_{PP}
V_{DRM}	Reverse Working Voltage
I_{DRM}	Maximum Reverse Leakage Current
I_R	Test Current
V_{BR}	Breakdown Voltage@ I_T
V_{SB}	Snapback Voltage
I_{SB}	Snapback Test Current
V_F	Forward Voltage
I_F	Forward Test Voltage

8. Typical Characteristics

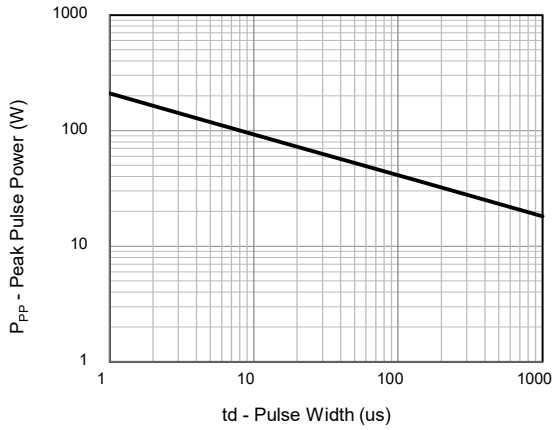


Figure 1. Peak Pulse Power Rating

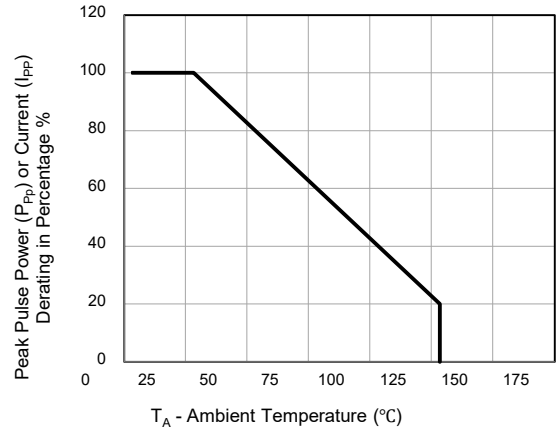


Figure 2. Pulse Derating Curve

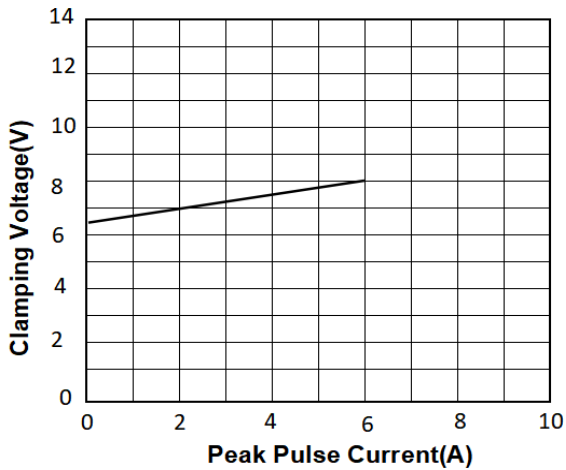


Figure 3. Typical Clamping Voltage

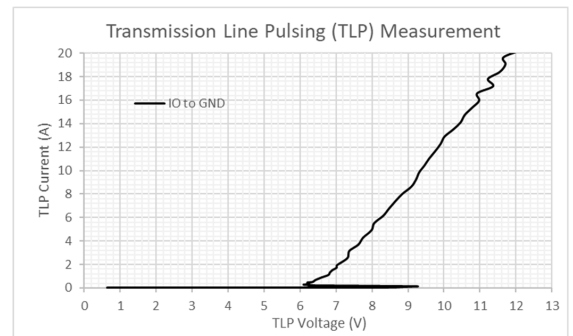
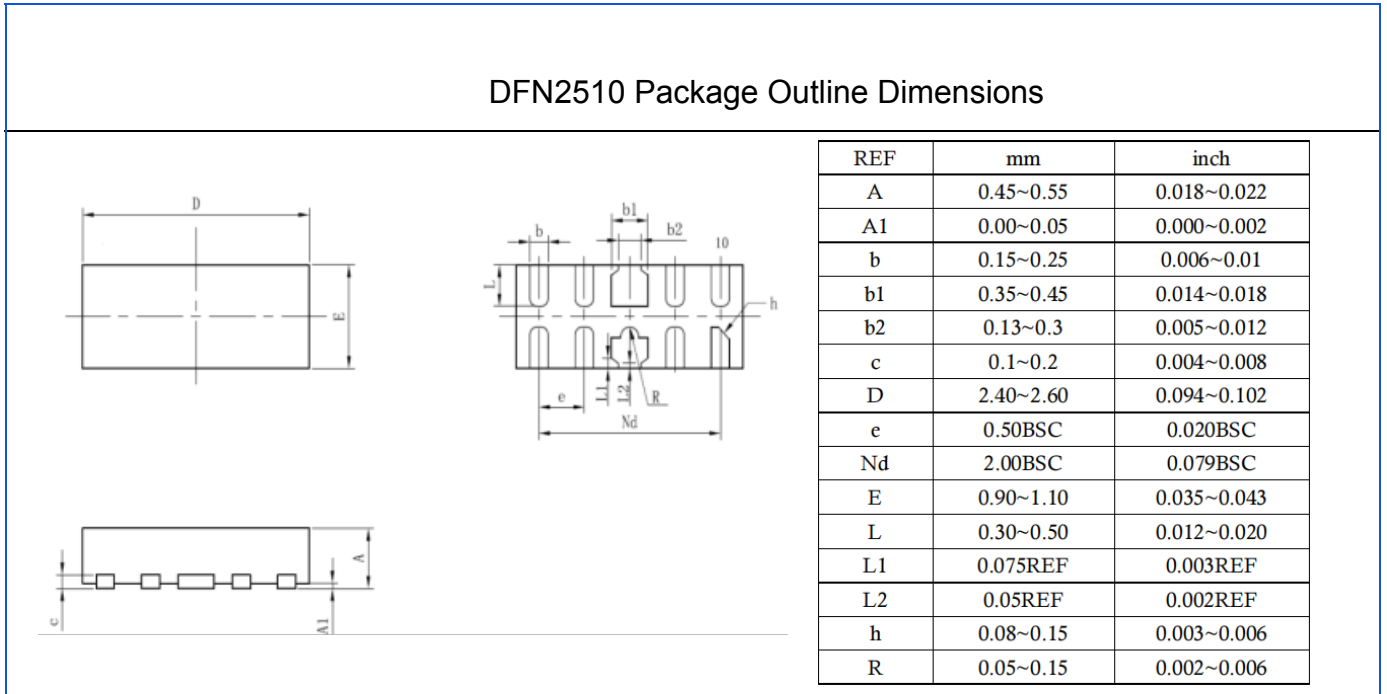


Figure 4. TLP(1/100ns)

9. Outline Drawing



10. Reel packing

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	QTY/Box (pcs)	Q'TY/Carton (pcs)
DFN2510	7'	178	3,000	30,000	120,000

11. Important Notice and Disclaimer

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