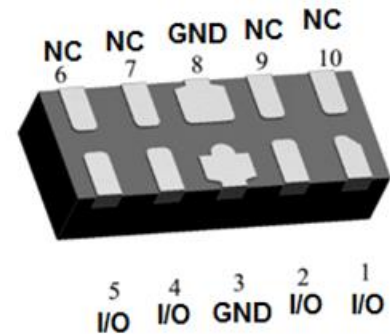
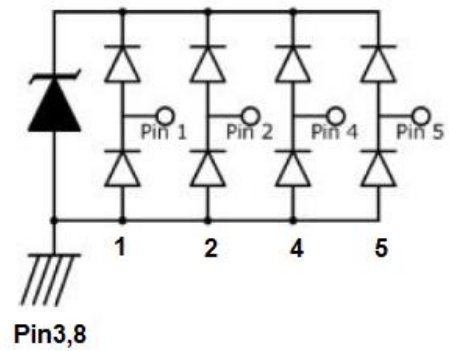


Features

- Transient protection for data&power lines to IEC 61000-4-2 (ESD): $\pm 25\text{kV}$ (air); $\pm 20\text{kV}$ (contact)
- Working Voltage: 5V
- Protects two or four I/O lines
- Ultra Low Capacitance: 0.3pF typical (I/O to I/O)
- RoHS compliant with Halogen-free
- Qualified to AEC-Q101 Standards

HF



DFN2510-10L

Typical Applications

- Serial ATA
- PCI Express
- MDDI Port
- High Definition Multi-Media Interface (HDMI)
- Digital Video Interface (DVI)
- Unified Display Interface (UDI)

Mechanical Data

- Case: DFN2510-10L
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
TBLC0524P	DFN2510-10L	3000 pcs / Tape * Reel	P524

Maximum Ratings (@T_A=25°C unless otherwise specified)

Characteristic	Symbol	Value	Units
Peak pulse power (tp = 8/20μs)	P _{PK}	100	W
Peak pulse current (tp = 8/20μs)	I _{PP}	5	A
Reverse Stand-off Voltage	V _{RWM}	5	V
ESD according to IEC61000-4-2 contact discharge	V _{ESD}	±20	kV
ESD according to IEC61000-4-2 air discharge	V _{ESD}	±25	kV

Thermal Characteristics

Parameter	Symbol	Value	Units
Junction temperature	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Reverse breakdown voltage	V_{BR}	$I_T=1\text{mA}$, Any I/O pin to GND	6	-	-	V
Reverse leakage current	I_R	$V_{RWM}=5\text{V}$, Any I/O pin to GND	-	-	1	μA
Clamping voltage	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$, Any I/O pin to GND	-	-	12	V
		$I_{PP}=5\text{A}$, $t_p=8/20\mu\text{s}$, Any I/O pin to GND	-	-	20	V
Junction capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$, any I/O pin to GND	-	-	0.8	pF

Ratings and Characteristic Curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

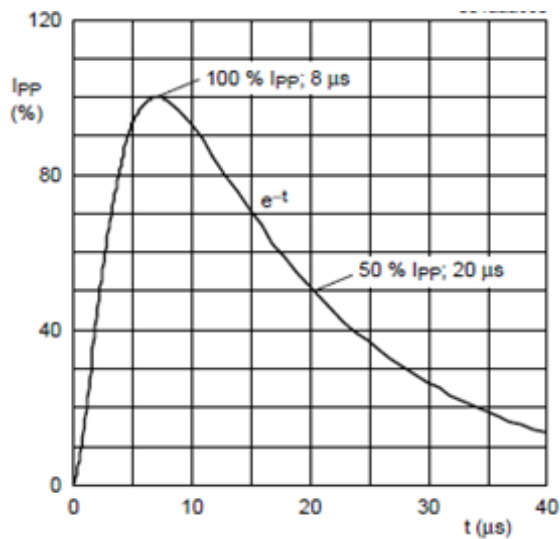


Fig1. 8/20us pulse waveform according to IEC61000-4-5

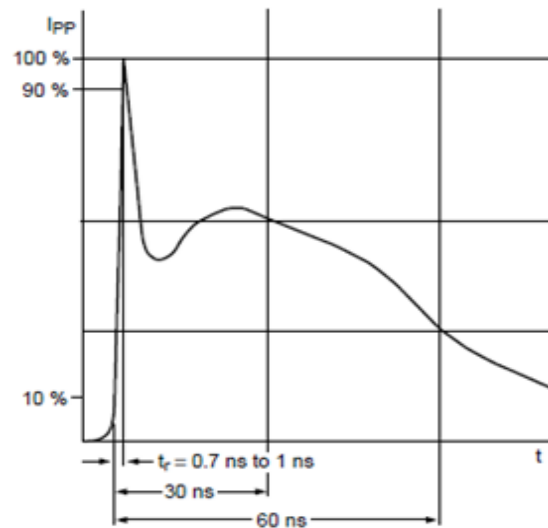
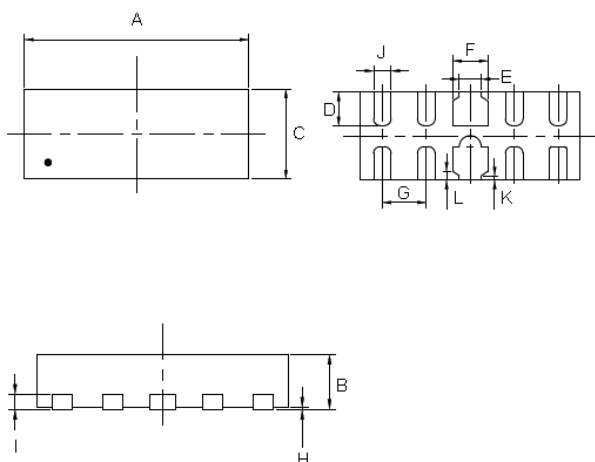


Fig2. ESD pulse waveform according to IEC61000-4-2

Package Outline Dimensions (Unit: mm)

DFN2510-10L



DFN2510-10L		
Dimension	Min.	Max.
A	2.400	2.600
B	0.450	0.550
C	0.950	1.050
D	0.350	0.450
E	0.200	0.450
F	0.350	0.450
G	0.400	0.600
H	0.000	0.010
I	0.100	0.200
J	0.100	0.250
K	0.000	0.050
L	0.000	0.095

Mounting Pad Layout (Unit: mm)

DFN2510-10L

