

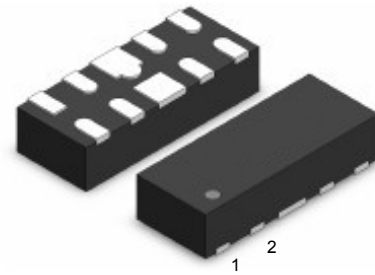
## Features

- 80Watts peak pulse power ( $t_p = 8/20\mu s$ )
- DFN2510 package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance (0.2pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
  - IEC 61000-4-2  $\pm 15KV$  contact  $\pm 15KV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 6A (8/20 $\mu s$ )
- RoHS compliant

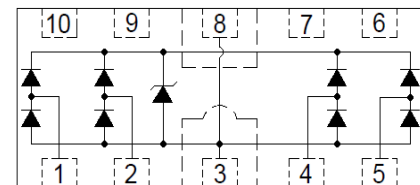
## Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- High speed serial interfaces

## SESLC5VD2510L-10U



DFN2510



Schematic Diagram

## Absolute Maximum Ratings

( $T_A=25^\circ C$ , Unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P=8/20\mu S$ )	$P_{PP}$	80	W
Peak Pulse Current ( $t_P = 8/20\mu S$ )	$I_{PP}$	6	A
Junction Temperature	$T_J$	-55 to +125	$^\circ C$
Storage temperature	$T_{STG}$	-55 to +150	$^\circ C$

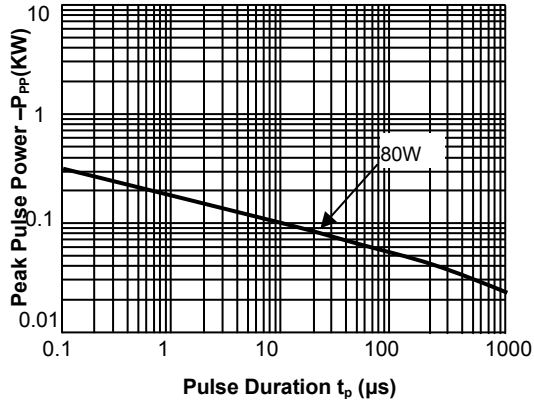
## Electrical Characteristics

( $T_A=25^\circ C$ , Unless otherwise specified.)

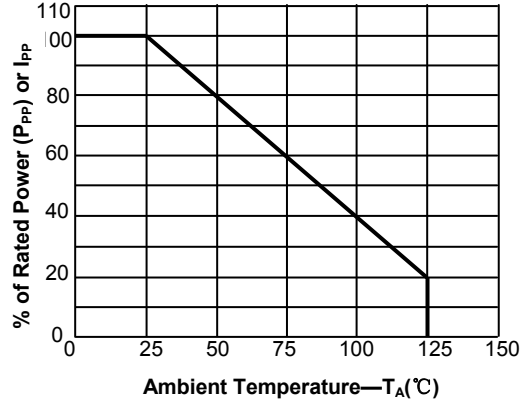
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6	6.8	8.5	V
Reverse Leakage Current	$I_R$	$V_R=5V$		0.01	1	$\mu A$
Clamping Voltage(SURGE)	$V_C$	$I_{PP}=6A, T_P=8/20\mu S$		14	16	V
Trigger Voltage(ESD)	$V_T$	$V_{ESD} = +8kV$		90		V
Clamping Voltage(ESD)	$V_C$	$V_{ESD} = +8kV$		15		V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz, I/O$ to I/O		0.2	0.4	pF
	$C_J$	$V_R=0V, f=1MHz, I/O$ to GND		0.4	0.8	pF

## Typical Characteristic Curves

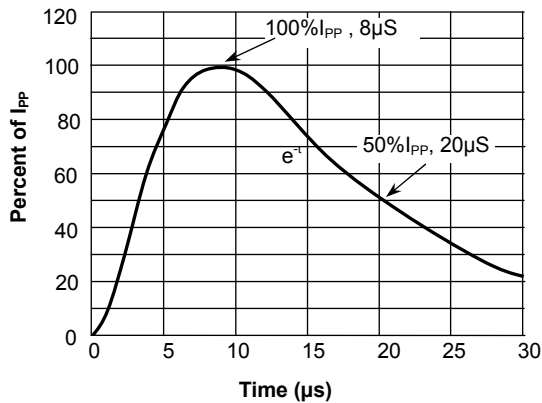
**Fig.1 Peak Pulse Power Rating Curve**



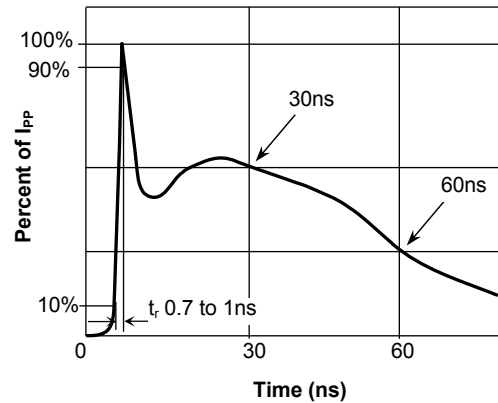
**Fig.2 Pulse Derating Curve**



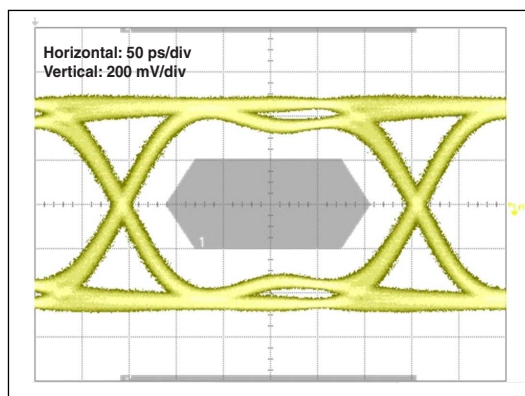
**Fig.3 Pulse Waveform-8/20μs**



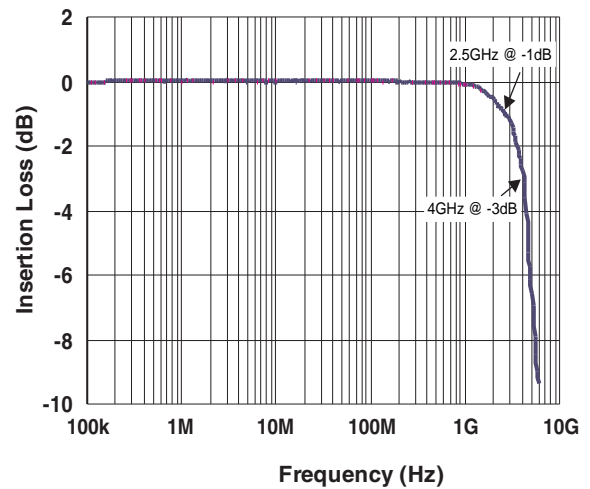
**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



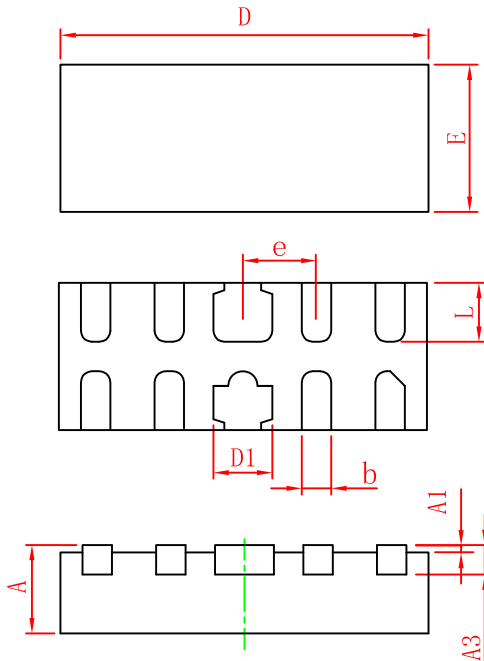
**Fig.5 Eye Diagram - HDMI mask at 3.4Gbps per channel (with SESLC5VD2510-10U)**



**Fig.6 Insertion Loss S21 - I/O to GND**

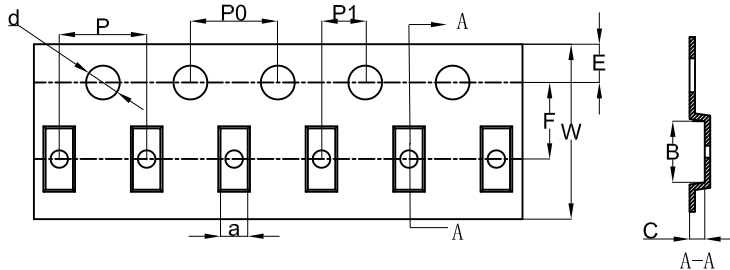


## Product Dimensions



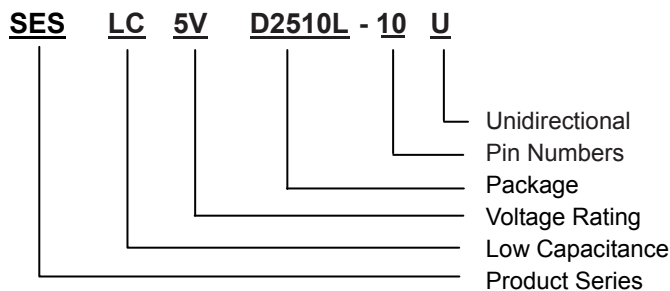
Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.45	0.50	0.55
A1	-	0.02	0.05
A3	0.10	0.15	0.20
D	2.45	2.50	2.55
E	0.95	1.00	1.05
D1	0.35	0.40	0.45
b	0.15	0.20	0.25
e	0.50BSC		
L	0.35	0.40	0.45

## Package Information



Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
DFN2.5*1-10L	1.23	2.70	0.7	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

## Part Number System



### Order Information

Device	Package	Carrier	Quantity	HSF Status
SESLC5VD2510L-10U	DFN2510	Tape & Reel (7")	3000pcs / Reel	RoHS Compliant

### Revision history


Date	Revision	Description of changes
25-March-2014	A0	First issue

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