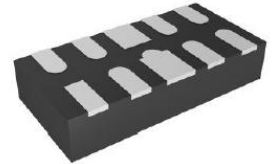
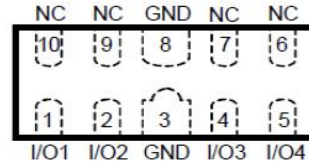


Low Capacitance TVS Diode Array

APPLICATION

- ◆ HDMI interface
- ◆ Digital Visual Interfac(DVI)
- ◆ Unified Display Interface(UDI)
- ◆ Display Port
- ◆ PCI Express
- ◆ Serial ATA



IEC COMPATIBILITY

- ◆ IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC61000-4-5 (Lightning) 24A (8/20μs)

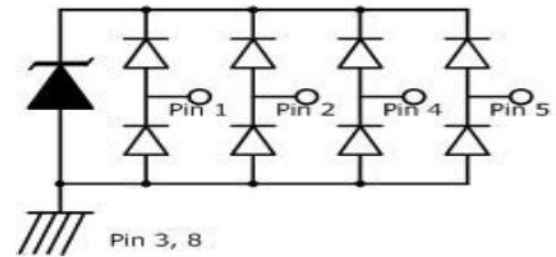
Package: DFN2510-10L



Contact: ±8kV Air: ±15kV

FEATURES

- ◆ Low operating Voltage: 5V
- ◆ Low clamping Voltage
- ◆ Moisture sensitivity level: level 1
- ◆ Small package: DFN2510-10L



PIN CONFIGURATION

Electrical Characteristics

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P _{ppp}	100	W
Peak Pulse Current (8/20μs)	I _{pp}	5	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±15	kV
ESD per IEC 61000-4-2 (Contact)		±8	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

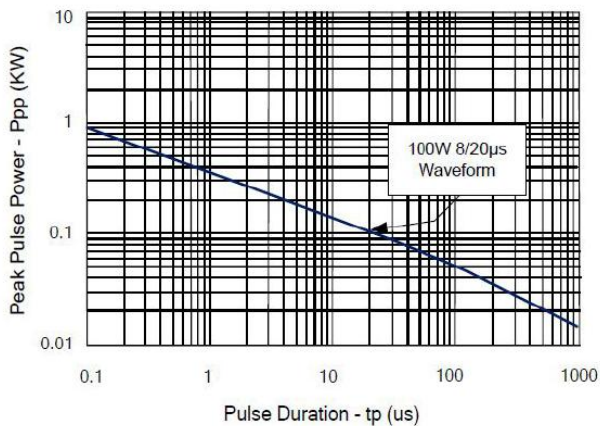
Low Capacitance TVS Diode Array

Electrical characteristics (T_A=25°C)

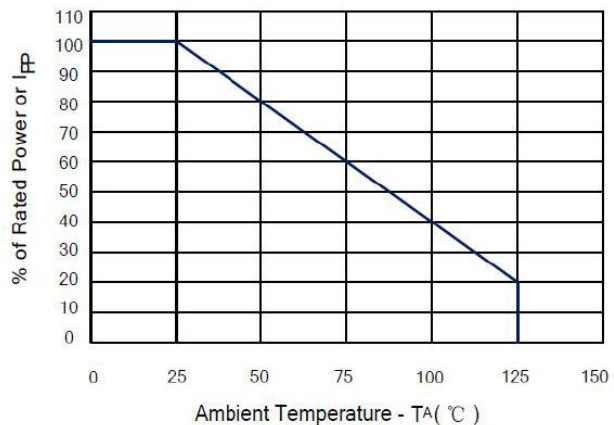
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	
Breakdown Voltage	V _{BR}	6		10	V	I _T = 1mA
Reverse Leakage Current	I _R			1	μA	V _{RWM} = 5.0V
Clamping Voltage	V _C			9	V	I _{PP} = 1A (8 x 20μs pulse), any I/O pin to ground
Clamping Voltage	V _C			15	V	I _{PP} = 5A (8 x 20μs pulse), any I/O pin to ground
Junction Capacitance	C _J		0.3	0.4	pF	V _R = 0V, f = 1MHz, between I/O pins
Junction Capacitance	C _J			0.8	pF	V _R = 0V, f = 1MHz, any I/O pin to ground

Typical Performance Characteristics (T_A=25°C unless otherwise Specified)

Non-Repetitive Peak Pulse Power vs. Pulse Time

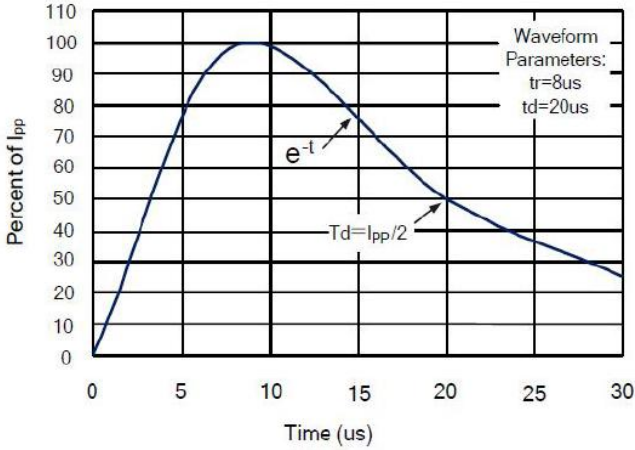


Power Derating curve

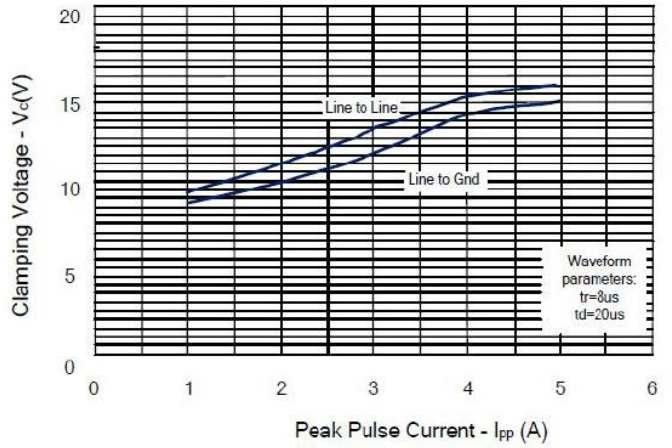


Low Capacitance TVS Diode Array

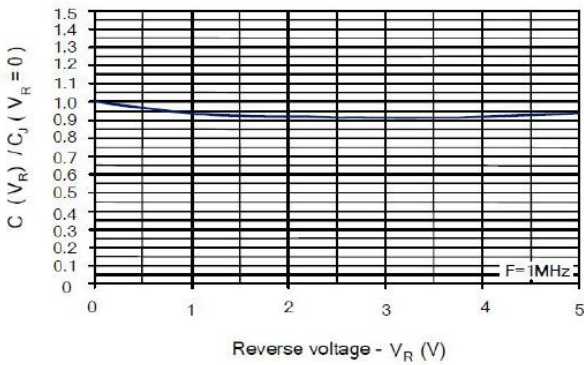
Pulse Waveform



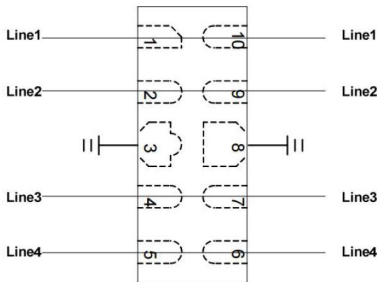
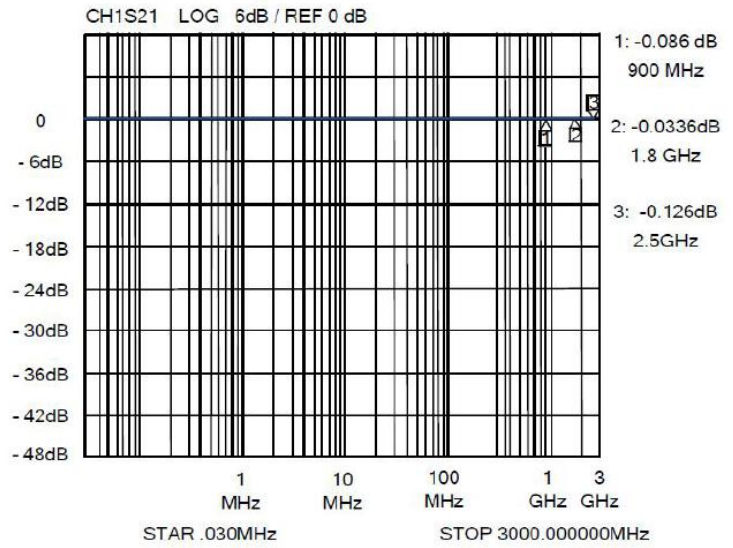
Clamping Voltage vs. Peak Pulse Current



Normalized Capacitance vs. Reverse Voltage

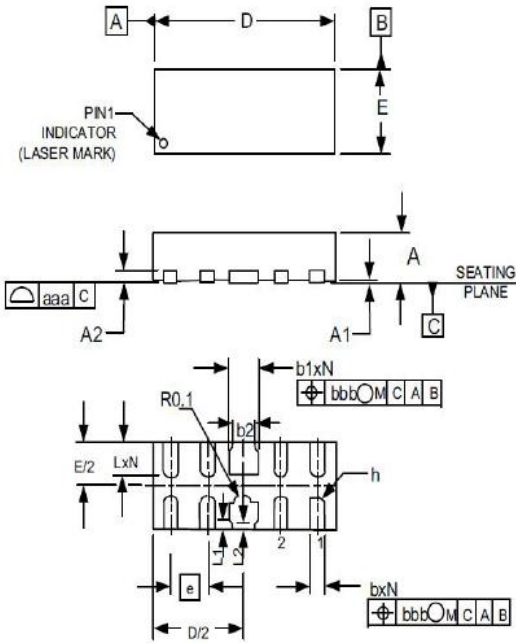


Insertion Loss S21 - I/O to GND



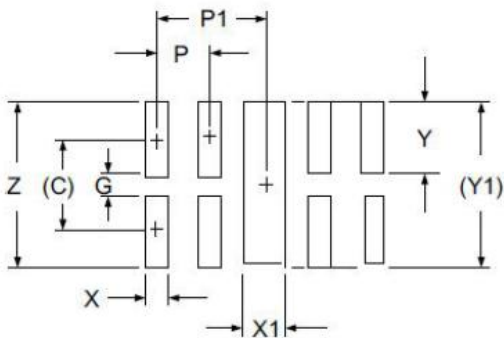
Low Capacitance TVS Diode Array

Package mechanical data



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	.017	.020	.022
A1	0.000	0.001	0.002	0.00	0.02	0.05
A2	(0.15)			(.006)		
b	0.10	0.20	0.25	.006	.008	.010
b1	0.35	0.40	0.45	.014	.016	.018
b2	0.20	0.25	0.45	.005	.010	.018
D	2.45	2.50	2.55	.096	.098	.100
E	0.95	1.00	1.05	.037	.039	.041
e	0.50 BSC			.020 BSC		
L	0.35	0.40	0.45	.014	.016	.018
L1	0.00	0.075	0.10	.000	.003	.004
L2	0.00	0.05	0.05	.000	.002	.003
h	0.00	0.12	0.15	.000	.005	.006
h	0.07	0.12	0.17	0.003	0.005	0.007
N	8			8		
aaa	0.08			0.003		
Bbb	0.10			0.004		

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	(0.875)	(.034)
G	0.20	.008
P	0.50	0.02
P1	1.00	.039
X	0.25	.010
X1	0.45	.018
Y	0.675	.027
Y1	(1.55)	(.061)
Z	1.55	.061

Ordering Information

Part Number	Qty per Reel	Reel Size	Package
SEU0524PC	3000pcs	7inch	DFN2510-10L