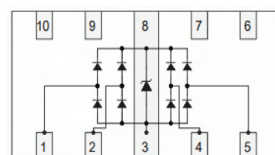


Features

- ★ 4 channels of ESD protection;
- ★ Provides ESD protection to IEC61000-4-2 level 4
 - $\pm 15\text{kV}$ air discharge
 - $\pm 8\text{kV}$ contact discharge;
- ★ Channel I/O to GND capacitance: 0.5pF (Max)
- ★ Channel I/O to I/O capacitance: 0.55pF (Max)
- ★ Low clamping voltage;
- ★ Low operating voltage;
- ★ Improved zener structure;
- ★ Optimized package for easy high speed data lines PCB layout;
- ★ RoHS compliant and Halogen Free.



DFN2510-10



Circuit Diagram

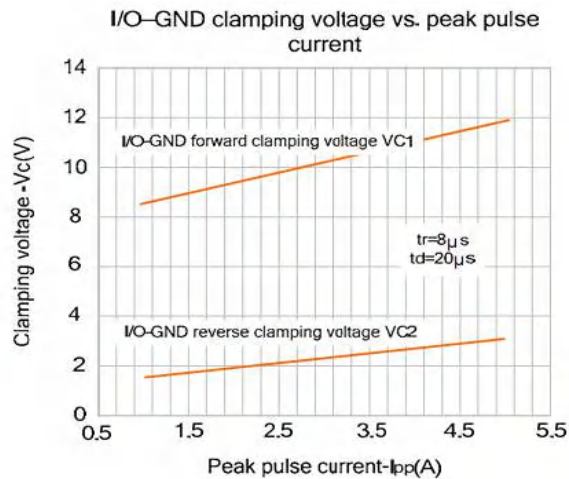
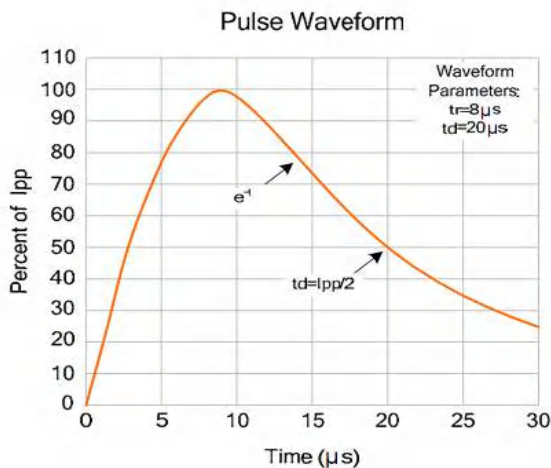
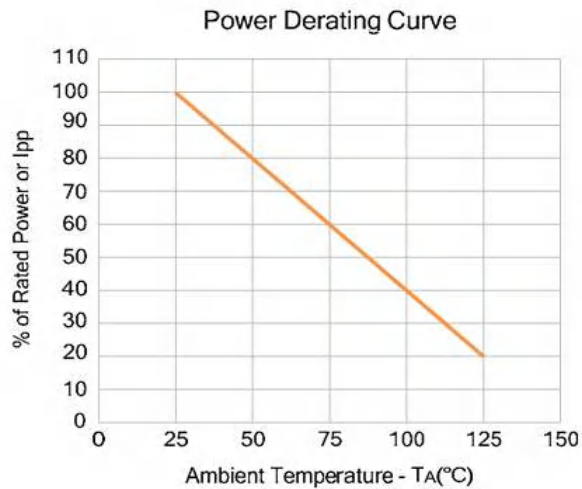
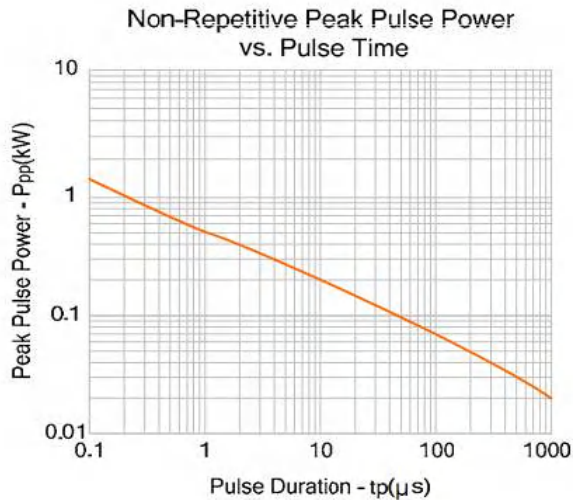
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power ($t_p = 8/20\mu\text{s}$)	150	W
I_{PP}	Peak Pulse Current(8/20us)	4	A
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD)	air discharge contact discharge	± 15 ± 8 KV

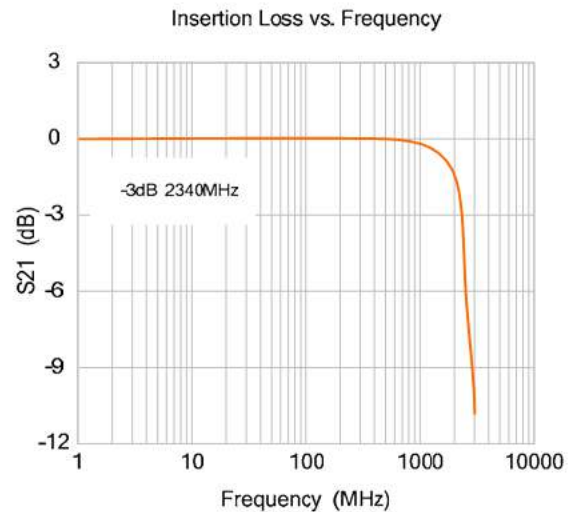
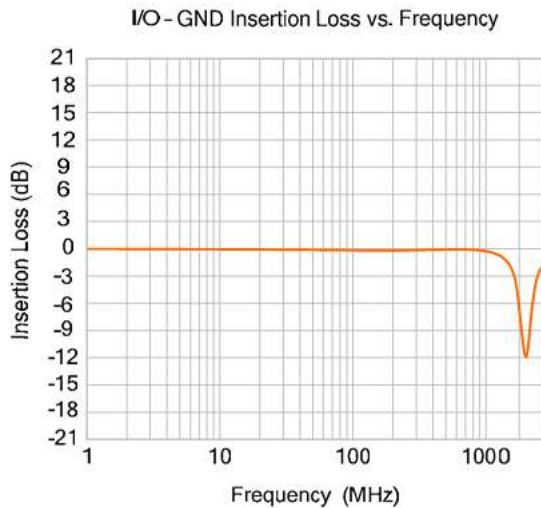
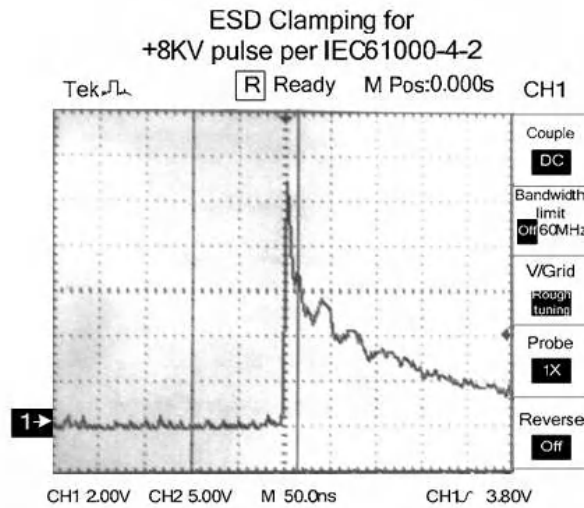
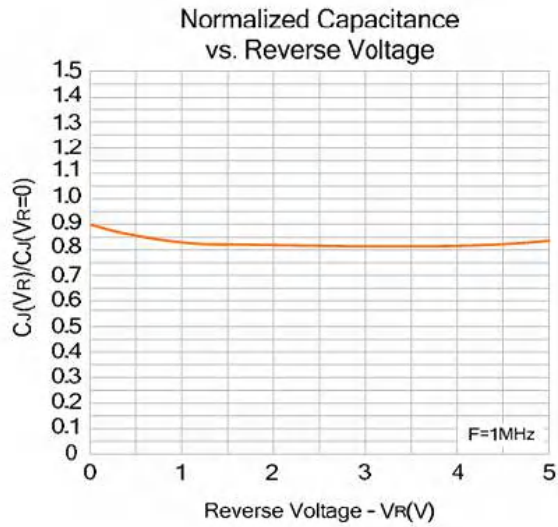
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Working Voltage	VRWM	—	—	5	V	Any I/O pin to GND
Reverse Breakdown Voltage	VBR	6	—	—	V	It = 1mA; Any I/O pin to GND
Reverse Leakage Current	IR	—	—	1	μA	VRWM = 5V, T=25°C; Any I/O pin to GND
Positive Clamping Voltage	VC1	—	8.5	22	V	IPP=4A, tp=8/20μs; Positive pulse; Any I/O pin to GND
Negative Clamping Voltage	VC2	—	1.8	—	V	IPP=1A, tp=8/20μs; Negative pulse; Any I/O pin to GND
Junction Capacitance Between Channel	CJ1	—	0.3	0.4	pF	VR=0V, f=1MHz; Between I/O pins
Junction Capacitance Between I/O And GND	CJ2	—	0.55	0.7	pF	VR=0V, f=1MHz; Any I/O pin to GND

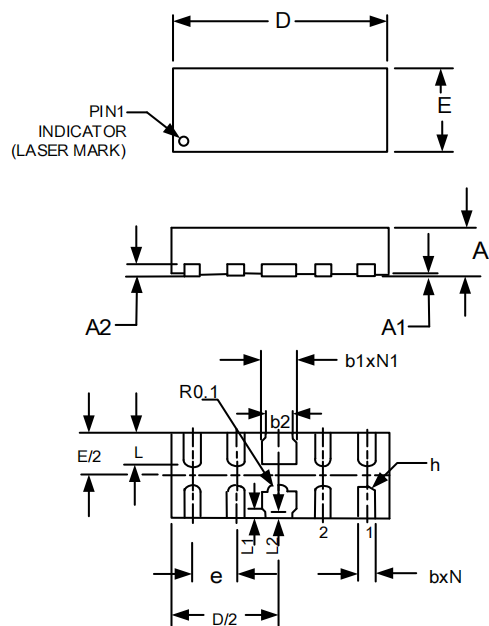
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

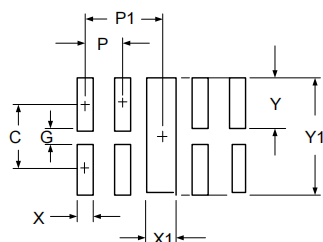


Outline Drawing –DFN2510-10



DIMENSIONS

DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.018	0.020	0.022	0.45	0.50	0.55
A1	0.000	0.001	0.002	0.00	0.02	0.05
A2	0.006			0.15		
b	0.006	0.008	0.010	0.15	0.20	0.25
b1	0.014	0.016	0.018	0.35	0.40	0.45
b2	0.008	0.010	0.018	0.20	0.25	0.45
D	0.096	0.098	0.100	2.45	2.50	2.55
E	0.037	0.039	0.041	0.95	1.00	1.05
e	0.020 BSC			0.50 BSC		
L	0.014	0.016	0.018	0.35	0.40	0.45
L1	0.000	0.003	0.004	0.00	0.075	0.10
L2	0.000	0.002	0.003	0.00	0.05	0.08
h	0.000	0.005	0.006	0.00	0.12	0.15
N	8			8		
N1	2			2		



DIMENSIONS

DIM	INCHES	MILLIMETERS
C	0.034	0.875
G	0.008	0.20
P	0.020	0.50
P1	0.039	1.00
X	0.010	0.25
X1	0.018	0.45
Y	0.027	0.675
Y1	0.061	1.55

Notes:

Controlling Dimension: Millimeter.