

Features

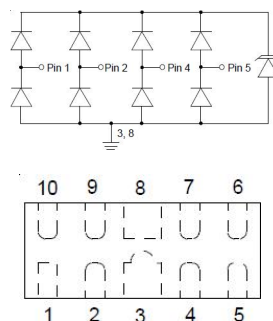
- 50 W (8/20 μ s) Peak Pulse Power
- Low Capacitance ESD Protection
- Flow Through DFN2.5x1.0-10L Package
- RoHS Compliant
- Matte Tin Lead finish (Pb-Free)
- Protect Four High Speed Data Lines
- Meet IEC61000-4-2 Level 4:
 - Contact Discharge > 20kV
 - Air Discharge > 25kV

Applications

- PCI Express
- MDDI Ports
- eSATA Interfaces
- Display Port Interface
- Digital Visual Interface (DVI)
- High Definition Multi-Media Interface (HDMI)

.3324

Schematic & PIN Configuration



DFN2510



Absolute Maximum Rating

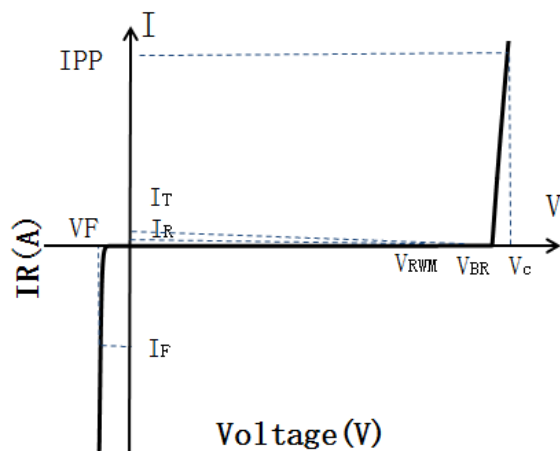
Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	50	W
IPP	Peak Pulse Current	4.5	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	25	kV
TJ	Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C

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

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				3.3	V
VBR	Reverse Breakdown Voltage	IT = 1mA	4	5.2	6.5	V
IR	Reverse Leakage Current	VRWM = 3.3 V			0.1	μA
VC	Clamping Voltage	IPP = 4.5A (8/20μs)			11	V
CJ	Capacitance	VR = 0V, f = 1MHz Between I/O pins		0.3	0.4	pF
CJ	Capacitance	VR = 0V, f = 1MHz Any I/O pin to ground		0.6	0.7	pF

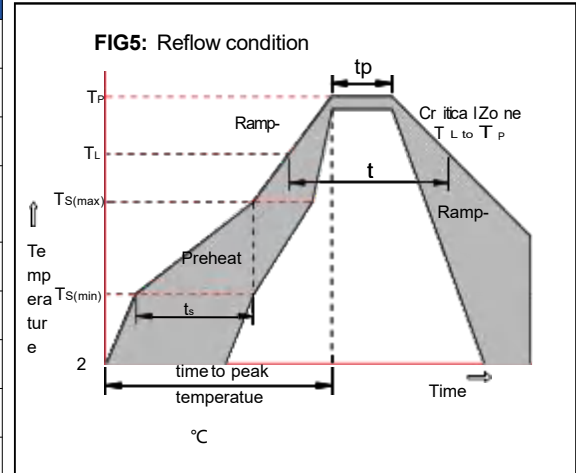
Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
IT	Test Current
IPP	Maximum Reverse Peak Pulse Current
Vc	Clamping Voltage @Ic



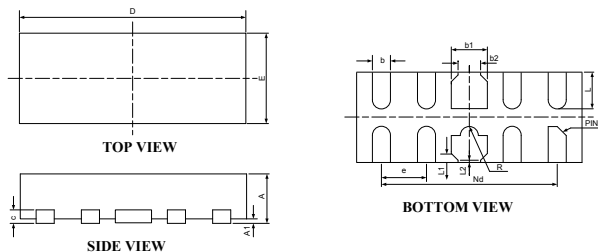
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

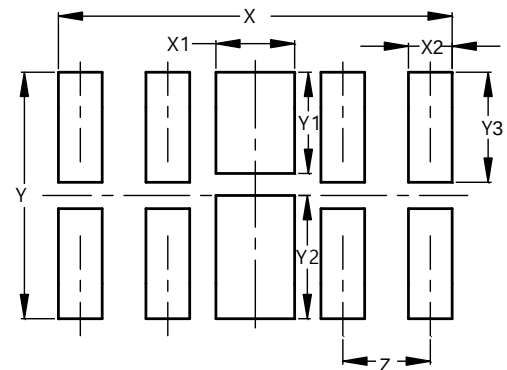


Package Dimensions & Suggested Pad Layout

DFN2510-10L



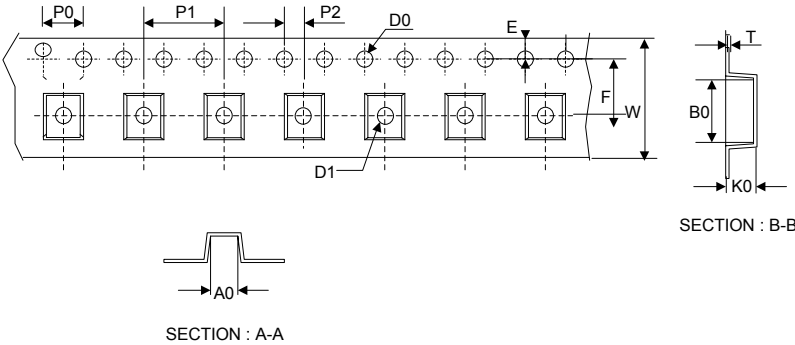
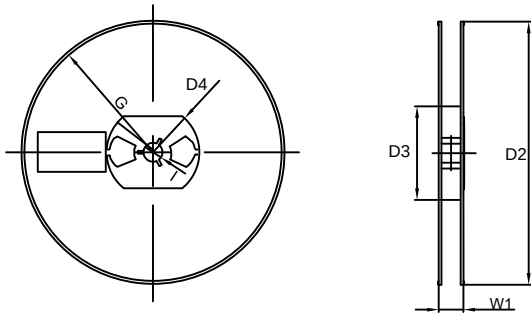
SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.15	0.20	0.25	0.006	0.008	0.010
b1	0.35	0.40	0.45	0.014	0.016	0.018
b2	0.20	0.25	0.30	0.008	0.010	0.012
c	0.10	0.15	0.20	0.004	0.006	0.008
D	2.45	2.50	2.55	0.098	0.100	0.102
e	0.50BSC			0.020BSC		
Nd	2.00BSC			0.080BSC		
E	0.95	1.00	1.05	0.038	0.040	0.042
L	0.35	0.40	0.45	0.014	0.016	0.018
L1	0.075REF			0.003REF		
L2	0.050REF			0.002REF		
h	0.08	0.12	0.15	0.003	0.005	0.006
R	0.05	0.10	0.15	0.002	0.004	0.006



Dimensions	Value (in mm)
Z	0.500
X	2.250
X1	0.450
X2	0.250
Y	1.400
Y1	0.570
Y2	0.700
Y3	0.600

Dimensions in inches and (millimeters)

Tape & reel specification

Tape		Symbol	Dimension (mm)
		P0	4.00±0.20
		P1	4.00±0.20
		P2	1.55±0.20
		D0	1.55±0.20
		D1	0.65±0.20
		E	1.55±0.25
		F	3.60±0.20
		W	8.00±0.20
		A0	1.65±0.20
		B0	3.00±0.20
		K0	1.10±0.20
		T	0.20±0.20
		D2	177.0±5.0
		D3	55Min.
7" Reel		D4	R24.6±2.0
		G	R82.0±2.0
		I	13.0±2.0
		W1	10.20±3.0
		Quantity: 3000PCS	