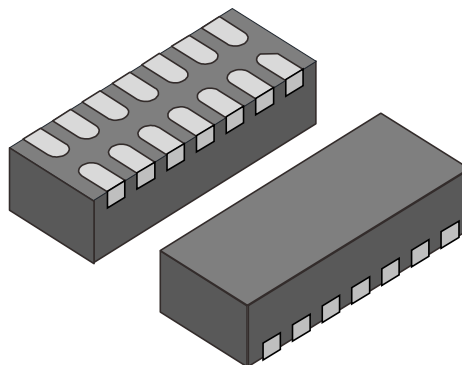


Ultra Low Capacitance 6-Line TVS Arrays

Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- Uni-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 0.45pF typical
- Operating voltage: 5V
- Low clamping voltage
- Low leakage current
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 25KV$
Contact discharge: $\pm 20KV$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 4A (8/20us)
- RoHS Compliant

Dimensions DFN3514P14



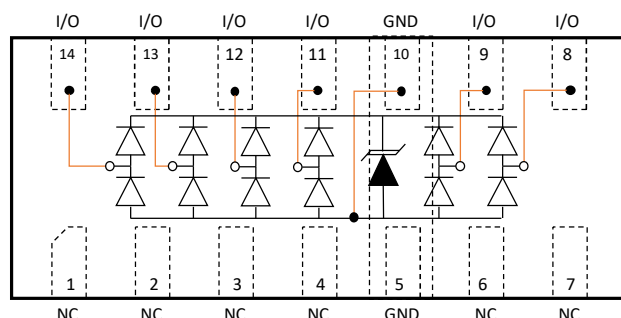
Applications

- LCD/PDP TVs
- External Storages
- Set Top Boxes
- Smartphones
- Ultrabooks/Notebooks
- Digital Cameras

Mechanical Characteristics

- Package: DFN3514P14
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000pcs
- Reel Size: 7 inch
- Device Marking: 0526P

Pin Configuration



Absolute Maximum Ratings ($T_{amb} = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	60	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 25	kV
ESD per IEC 61000-4-2 (Contact)		± 20	
Operating Temperature Range	T _J	-55 to +125	$^\circ C$
Storage Temperature Range	T _{STJ}	-55 to +150	$^\circ C$

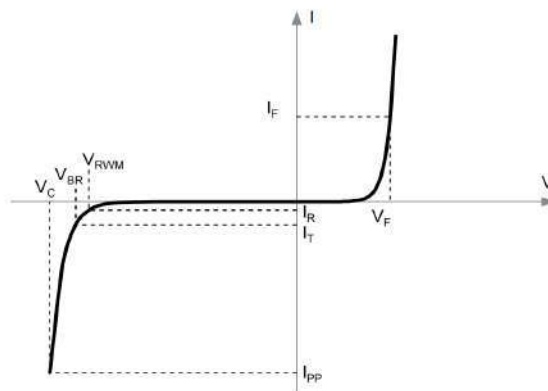
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	6	7		V
Reverse Leakage Current	I_R	$V_{RWM} = 5\text{V}$		0.001	0.1	uA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_p=8/20\mu\text{s}$		8		V
		$I_{PP} = 4\text{A}$, $t_p=8/20\mu\text{s}$		12	14	V
TLP Clamping Voltage	V_{CL}	$I_{PL} = 3\text{A}$, TLP:0.2/100ns		10		V
		$I_{PL} = 20\text{A}$, TLP:0.2/100ns		21.5		V
Dynamic Resistance	R_{DYN}	$t_p = 0.2/100\text{ns}$ (TLP)		0.68		Ω
Junction Capacitance	C_J	$V_{DC} = 0\text{V}$, $f=1\text{MHz}$		0.45	0.8	pF
Junction Capacitance between I/O pins		$V_{DC} = 0\text{V}$, $f=1\text{MHz}$		0.25	0.4	pF

Notes: The default test is I/O pin to ground.

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

Symbol	Definition
I_{PP}	Peak Pulse Current
V_C	Clamping Voltage
V_{RWM}	Reverse Working Voltage
I_R	Reverse Leakage Current
V_{BR}	Breakdown Voltage
I_T	Test Current
V_F	Forward Voltage
I_F	Forward Current



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

Fig.1 - Peak Pulse Power Rating

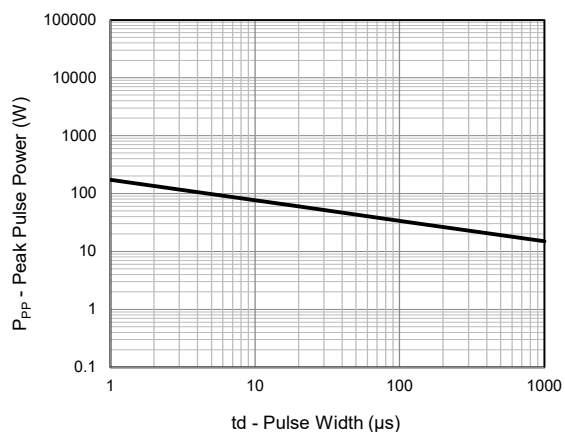


Fig.2 - Pulse Derating Curve

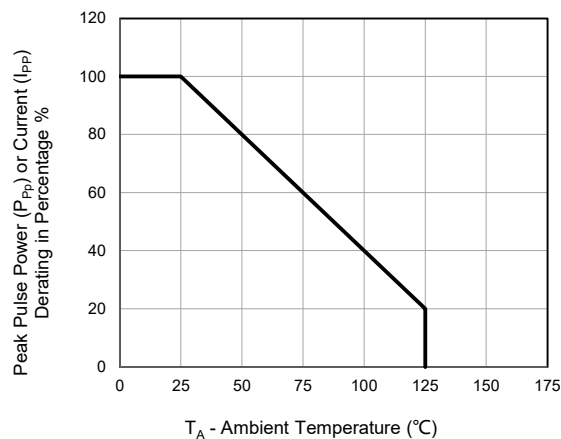


Fig.3 - 8/20us Pulse Waveform

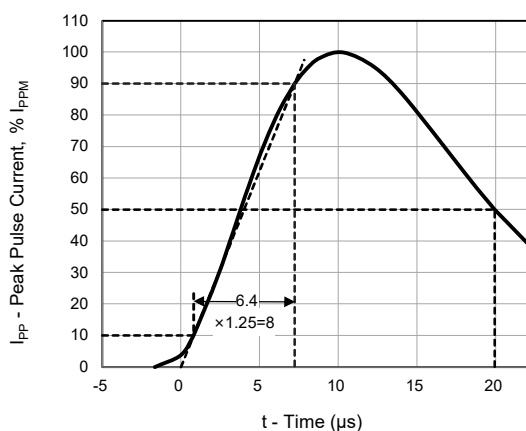


Fig.4 - Typical Clamping Voltage

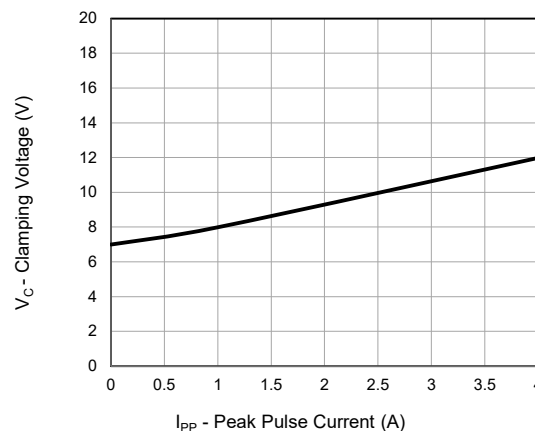


Fig.5 - ESD Pulse Waveform (IEC61000-4-2)

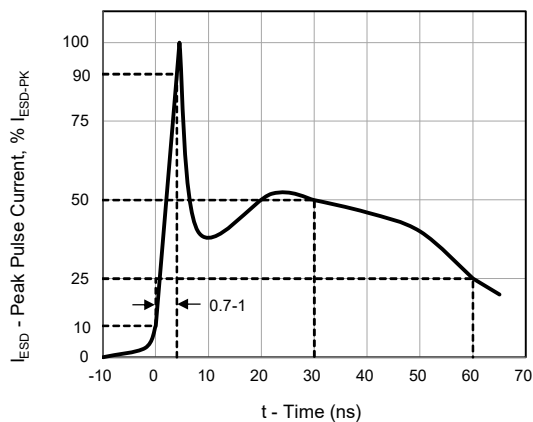
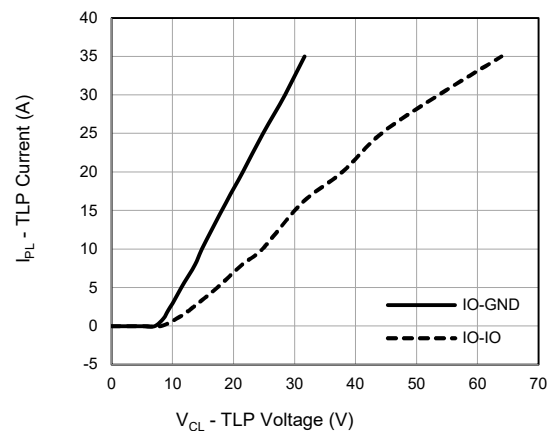
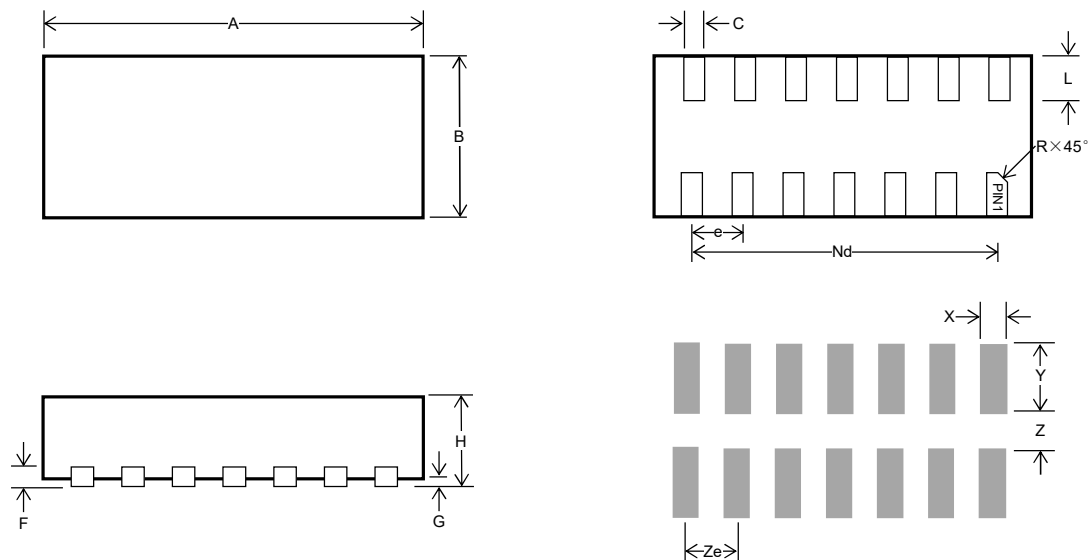


Fig.6 - TLP Curve ($t_p=0.2/100ns$)



DFN3514P14 Package Outline Drawing



DFN3514P14			
SYMBOL	Millimeters		
	MIN	NOM	MAX
A	3.4	3.5	3.6
B	1.25	1.35	1.45
C	0.15	0.2	0.25
F		0.203	
G	0	0.02	0.05
H	0.45	0.5	0.55
L	0.25	0.3	0.35
e		0.5	
R		0.1	
Nd		3	
X		0.3	
Y		0.5	
Z		0.65	
Ze		0.5	