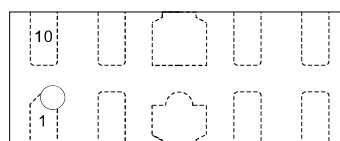


4-Line Ultra Low Capacitance TVS Diode Array

Features

- Ultra low capacitance: 0.25pF typical (I/O to I/O)
- Ultra low leakage: nA level
- Working voltage: 3.3V-5V
- Low clamping voltage
- Up to 4 lines protects
- Leadless flow-through package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-5 (Lightning) 14A (8/20 μs)
- RoHS Compliant

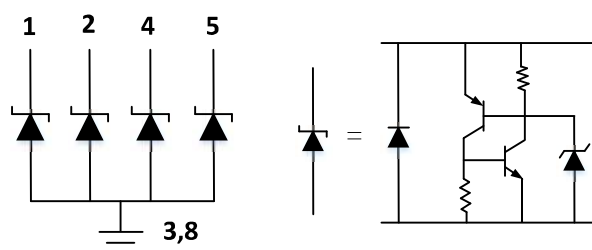
Dimensions DFN2510P10



Applications

- USB & HDMI Interfaces
- Portable electronics
- Servers, notebooks, and desktop PCs
- Set-top box
- Communication systems
- PoE

Pin Configuration



Mechanical Characteristics

- Package: DFN2510-10
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Quantity Per Reel: 3,000 pcs
- Reel Size: 7 inch
- Device Marking: .3V4UC

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

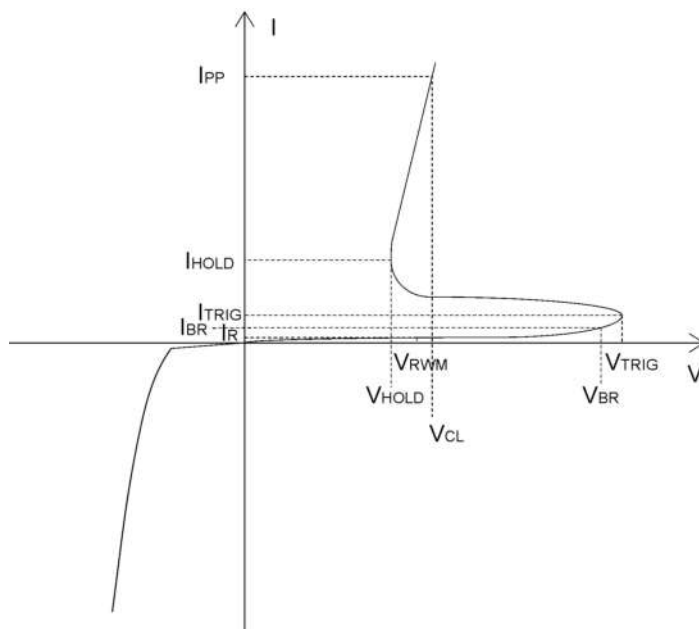
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	100	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T _J	-40 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

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

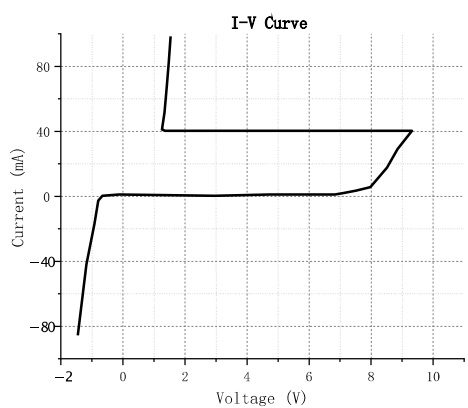
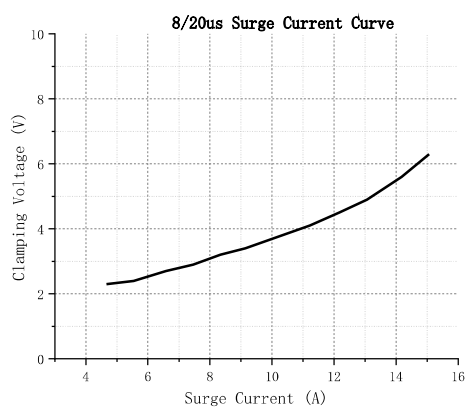
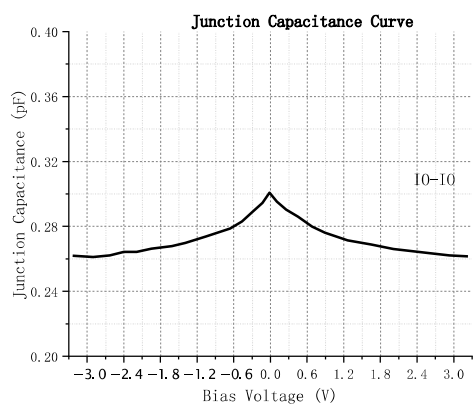
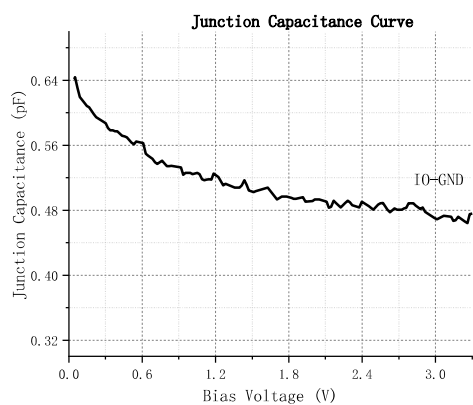
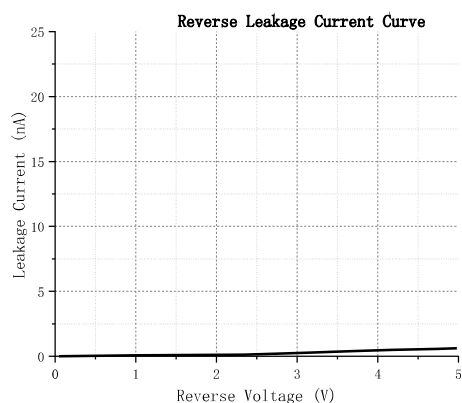
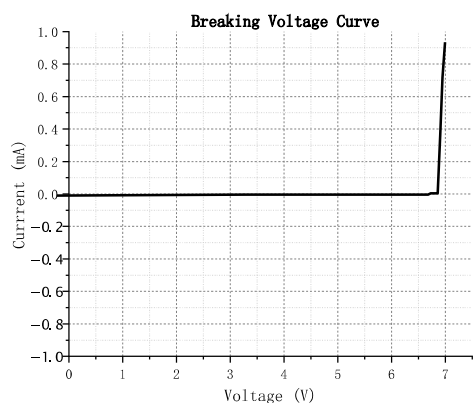
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}			3.3	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.5	7.1	8.5	V
Reverse Leakage Current	I_R	$V_{RWM}=3.3V$		1.0	100	nA
Clamping Voltage	V_{CL}	$I_{PP}=1A$; $t_p=8/20\mu s$		1.5	2.5	V
Clamping Voltage	V_{CL}	$I_{PP}=14A$; $t_p=8/20\mu s$		5.6	7.0	V
Junction Capacitance	C_J	$V_R=1.65V$; $f=1MHz$; IO-GND		0.45	0.55	pF
		$V_R=1.65V$; $f=1MHz$; IO-IO		0.25	0.35	

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

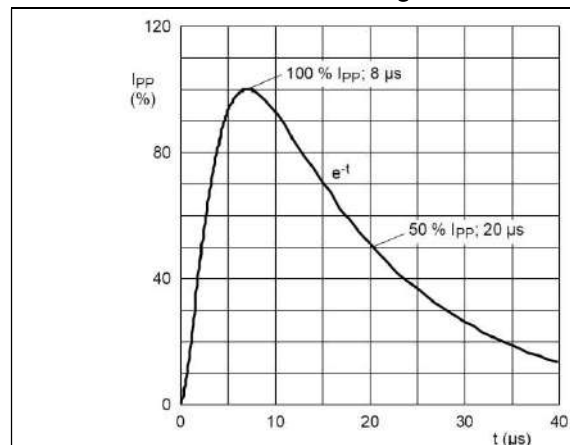
Symbol	Parameters
V_{RWM}	Reverse stand-off voltage
I_R	Reverse leakage current
V_{BR}	Reverse breakdown voltage
I_{BR}	Reverse breakdown current
V_{CL}	Clamping voltage
V_{TRIG}	Reverse trigger voltage
I_{TRIG}	Reverse trigger current
V_{HOLD}	Reverse holding voltage
I_{HOLD}	Reverse holding current
I_{PP}	Peak pulse current



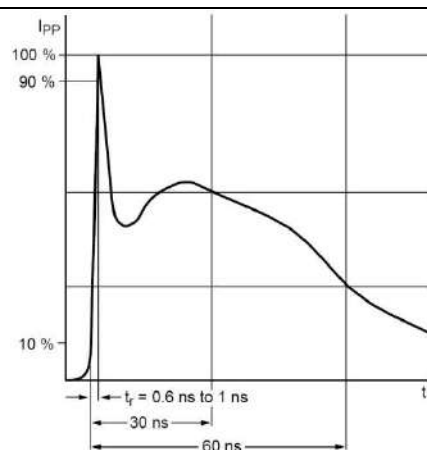
Typical Performance Characteristics(TA=25°C unless otherwise specified)



Measurement Wave According to IEC Standard

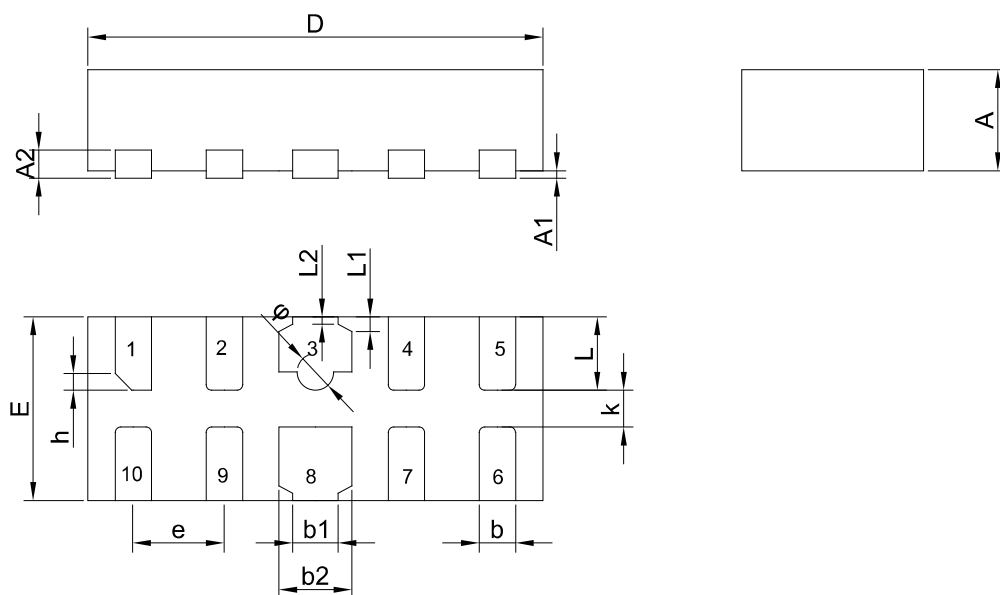


8/20 μ s pulse waveform according to
IEC 61000-4-5



ESD pulse waveform according to
IEC 61000-4-2

DFN2510-10 Package Outline Drawing



Dimensions in Millimeter

Symbol	Min.	Nom.	Max.	Symbol	Min.	Nom.	Max.
A	0.500	0.550	0.600	D	2.450	2.500	2.550
A1	0.00	/	0.05	E	0.950	1.00	1.050
A2	0.122	0.152	0.200	e	0.450	0.500	0.550
b	0.150	0.200	0.250	h	0.080	0.120	0.150
b1	0.200	0.250	0.300	k	0.150	0.200	0.250
b2	0.350	0.400	0.450	L	0.350	0.400	0.450
L1	0.075 REF			L2	0.05 REF		
φ	0.150	0.200	0.250				