

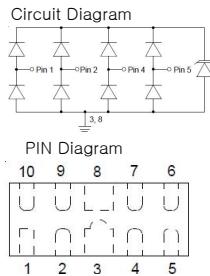


ESD73034D

4-Line Uni-directional TVS Diode

Features

- 5.0 W (8/20 µs) 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

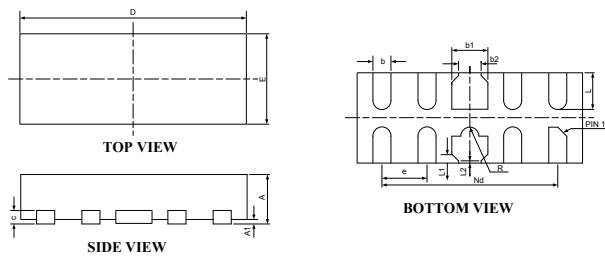


Applications

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



DFN2510-10



SYM	DIMENSIONS			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 in inches and (millimeters)

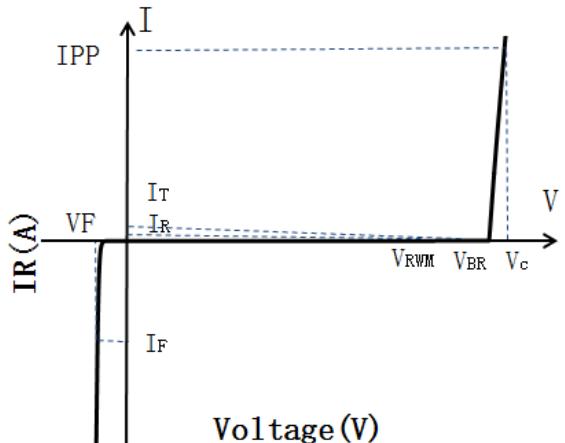
Maximum Ratings ($T_a = 25^\circ\text{C}$)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	50	W
IPP	Peak Pulse Current	4.5	A
V _{ESD} (Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
V _{ESD} (Air)	Air ESD Voltage per IEC61000-4-2	25	kV
T _J	Junction Temperature	-55 to +125	°C
T _{STG}	Storage Temperature	-55 to +150	°C

ESD73034D

Symbol	Parameter
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_c	Clamping Voltage @ I_c

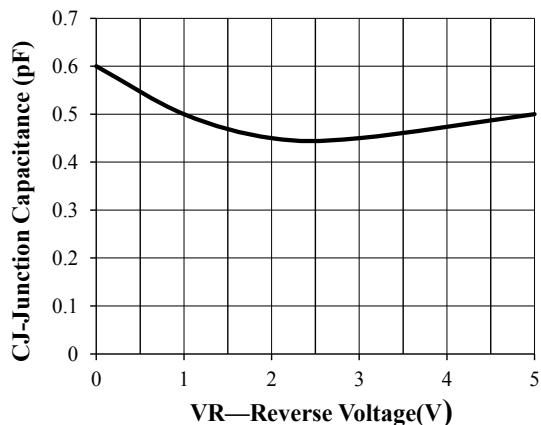
Portion Electronics Parameter



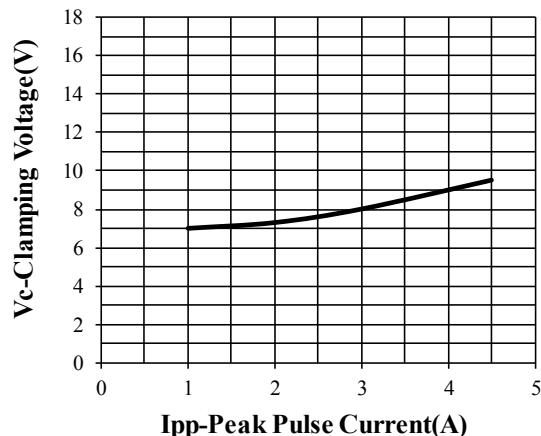
Electrical Characteristics ($T_a = 25^\circ C$)

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

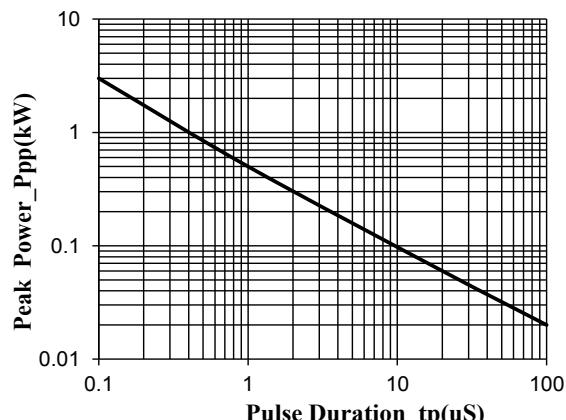
RATING AND CHARACTERISTIC CURVES (ESD73034D)



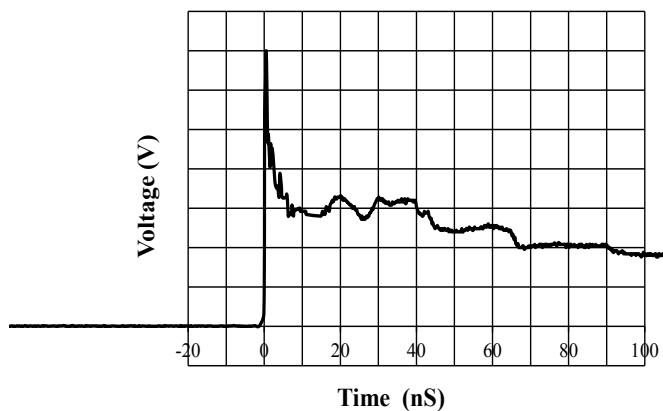
Junction Capacitance vs. Reverse Voltage



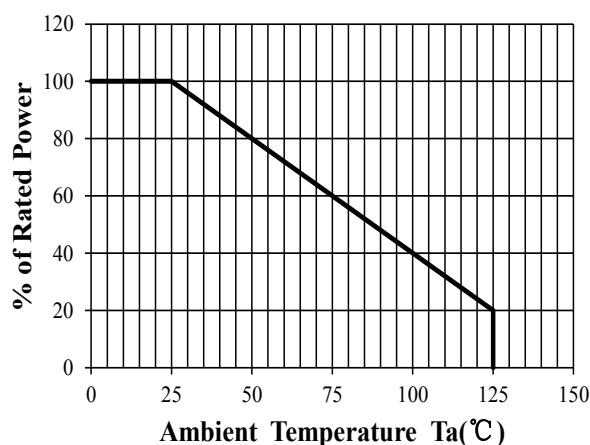
Clamping Voltage vs. Peak Pulse Current



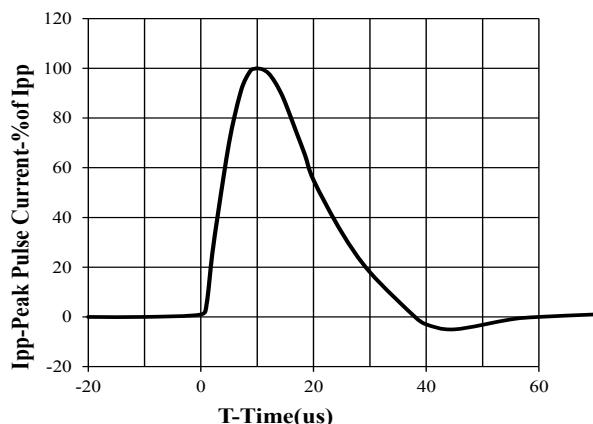
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

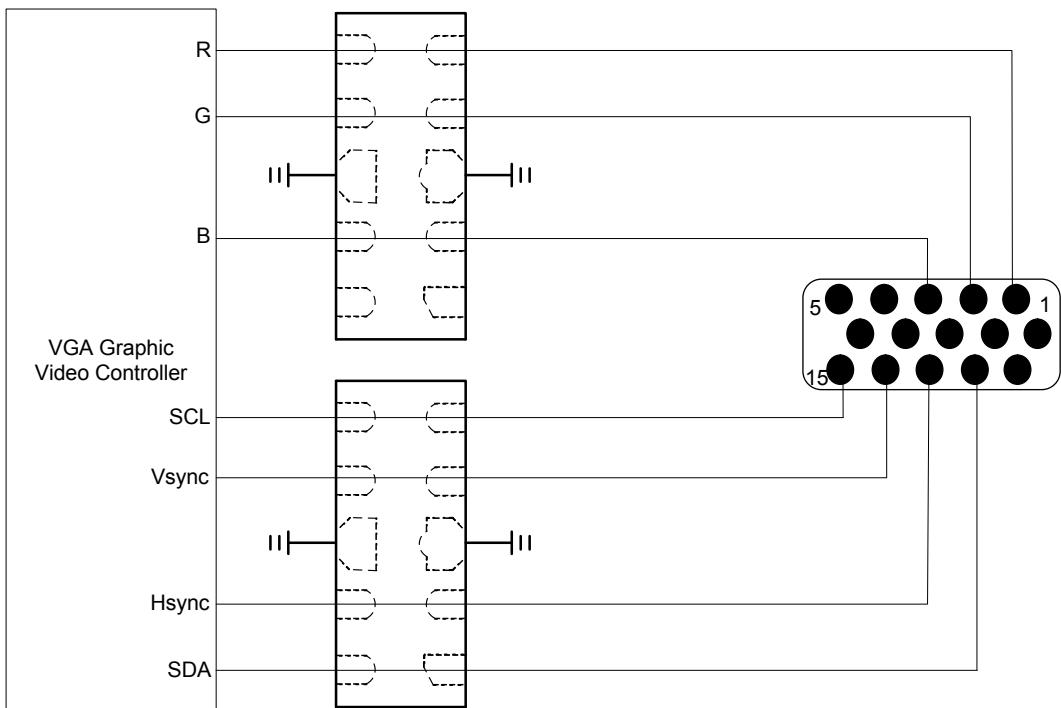


Power Derating Curve



8 X 20us Pulse Waveform

PESD3324P on VGA Port Application



PESD3324P on eSATA Port Application

