

Uni-directional TVS Diode

Features

- Ultra small package: 2.0x2.0x0.5mm
- Ultra low capacitance: 800pF Max
- Low operating voltage: 24V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
 - – IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
 - – IEC 61000-4-4 (EFT) 80A (5/50ns)
 - – IEC61000-4-5 (Lightning)120A (8/20 μs)
- RoHS Compliant

Mechanical Characteristics

- Package: DFN2020-2
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

Applications

- Cell Phone Handsets and Accessories
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Serial and Parallel Ports.

Ordering Information

Part Number	Qty per Reel	Reel Size
FTVS2491D2	3000	7"

Pin Configuration





FTVS2491D2

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	6000	W
Peak Pulse Current (8/20μs)	Ipp	120	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			24	V	
Breakdown Voltage	V _{BR}	26	27	30	V	I _T = 1mA
Reverse Leakage Current	I _R			1	uA	V _{RWM} = 24V
Clamping Voltage	V _C			50	V	I _{pp} =50A(8x 20us pulse)
Clamping Voltage	V _C			60	V	I _{pp} =120A(8x 20us pulse)
Junction Capacitance	C _J			800	pF	V _R = 0V, f = 1MHz

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

Fig1. 8/20μs Pulse Waveform

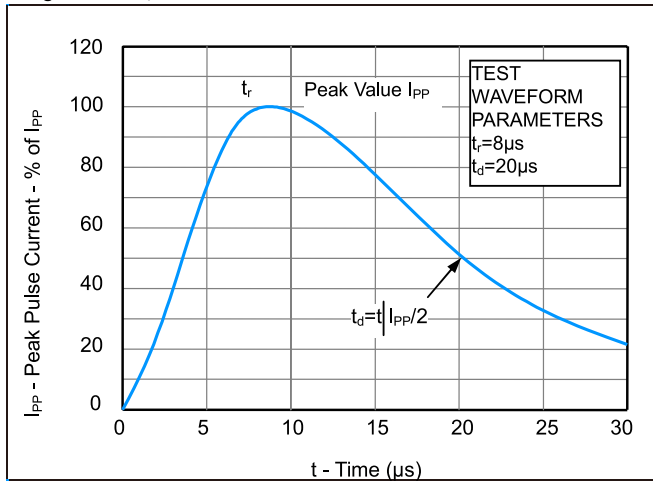


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

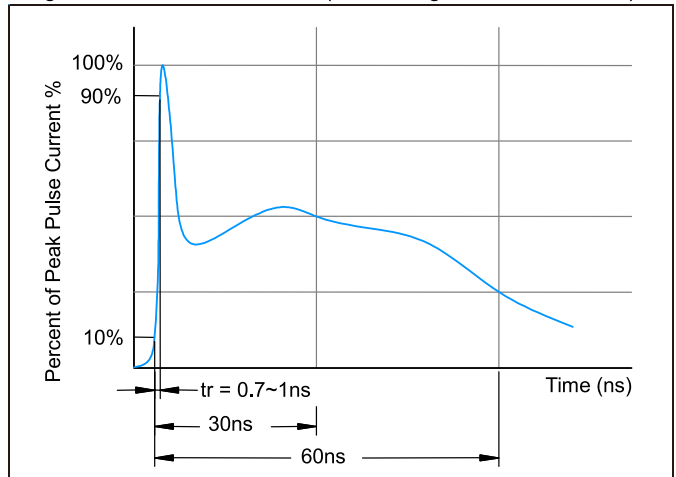
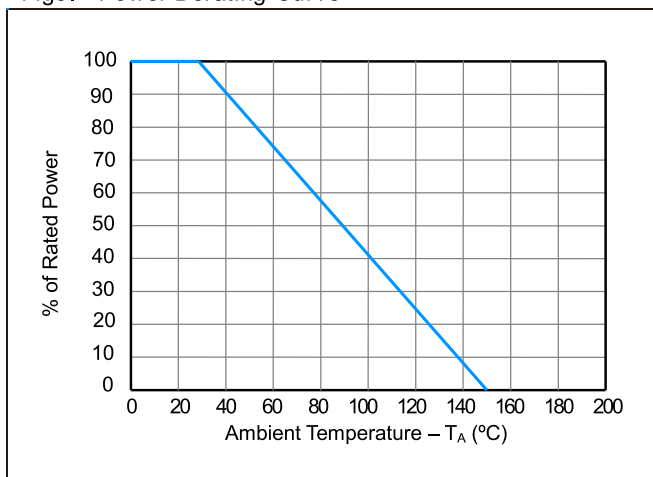
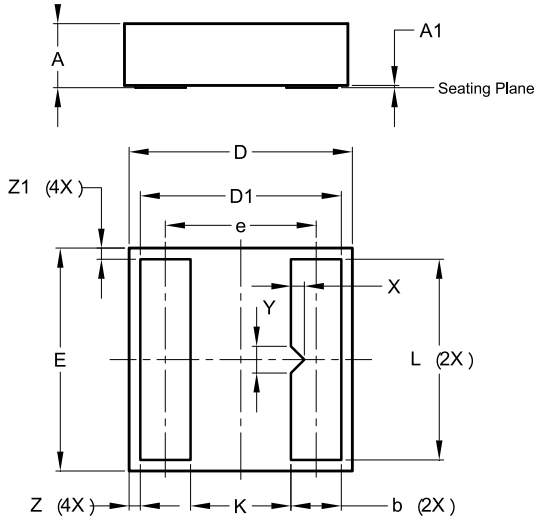


Fig3. Power Derating Curve



DFN2020-2 Package Outline Drawing



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.50	0.55	0.60
A1	0.00	0.02	0.05
b	0.40	0.45	0.50
c	0.152 REF.		
D	1.90	2.00	2.10
e	1.35BSC		
E	1.90	2.00	2.10
L	1.75	1.80	1.85
X	0.07	0.12	0.17
Y	0.19	0.24	0.29

Suggested Land Pattern

