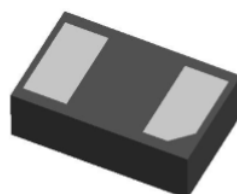


1-Line Uni-directional TVS Diode

Features

- Ultra low leakage: nA level
- Operating voltage: 30V
- 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: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning)30A (8/20 μs)
- RoHS Compliant

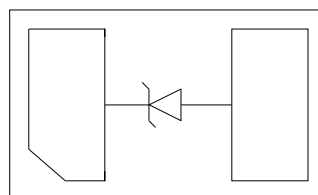
Dimensions DFN1610-2



Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

Pin Configuration



Mechanical Characteristics

- Package: DFN1610-2
- Lead Finish: NiPdAu
- Case Material: "Green" Molding Compound.
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 10,000 pcs
- Reel Size: 7 inch
- Device Marking: EHW

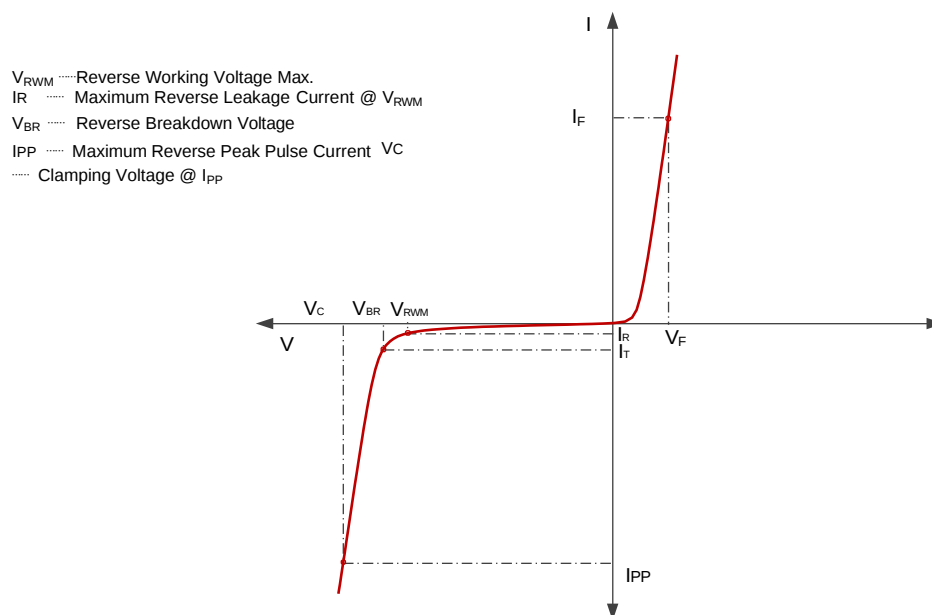
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	1800	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	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +125	°C

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

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				48	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	56			V
Reverse Leakage Current	I_R	$V_{RWM} = 48V$			1	μA
Clamping Voltage	V_C	$I_{PP} = 30A$ (8 x 20 μs pulse)			60	V
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$		108	150	pF

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



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

Figure 1: Peak Pulse Power vs. Pulse Time

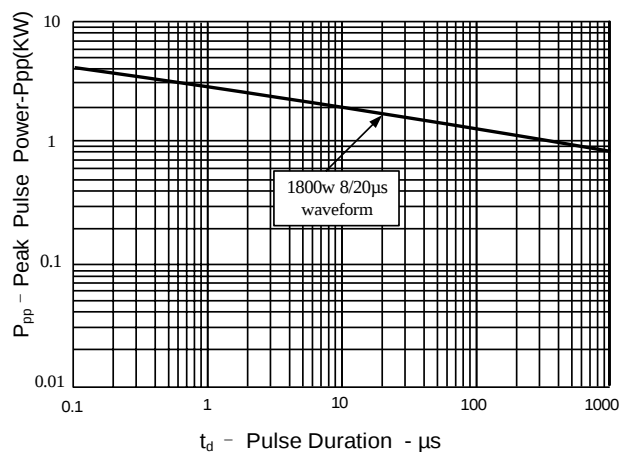


Figure 2: Power Derating Curve

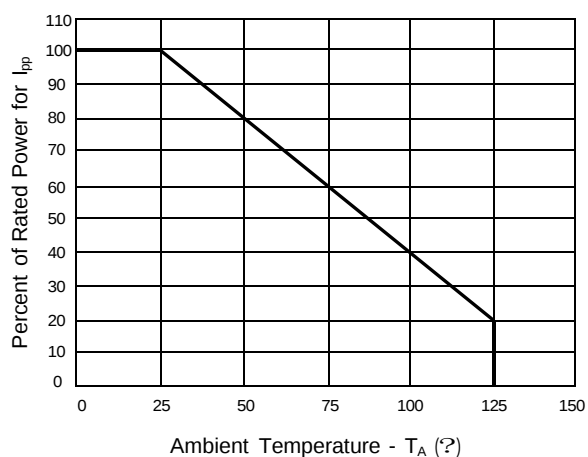


Figure 3: Pulse Waveform

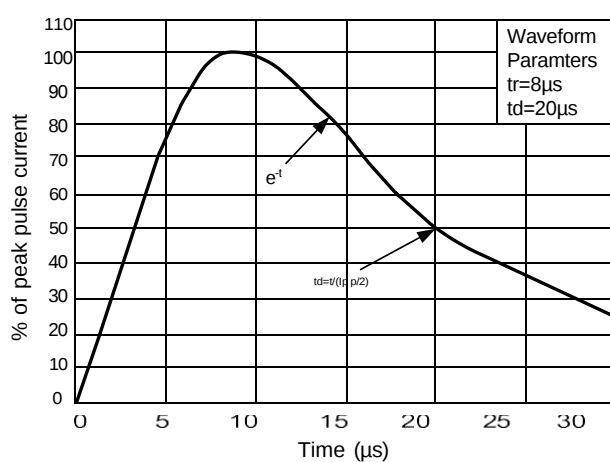
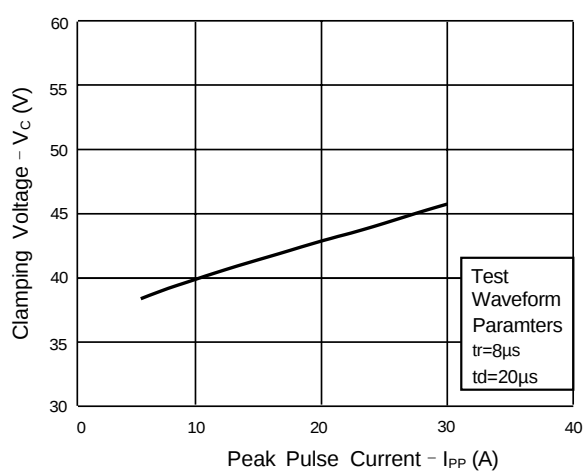
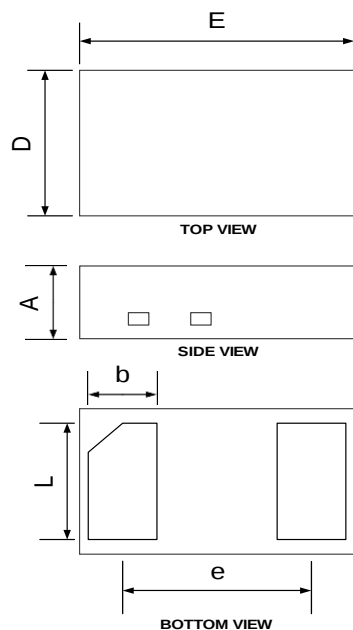


Figure 4: Clamping Voltage vs. Ipp

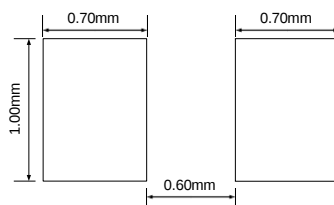


DFN1610-2 Package Outline Drawing



COMMON DIMENSION (mm)			
PKG	DFN1610		
REF.	MIN.	NOM.	MAX.
A	0.450	0.500	0.55
D	0.95	1.00	1.05
E	1.55	1.60	1.65
b	0.35	0.4	0.45
e	1.10BSC		
L	0.75	0.80	0.85

Suggested Land Pattern



* This land pattern is for reference purposes only