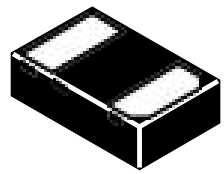
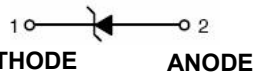
Features

- 5V uni-directional ESD diode
- Ultra low leakage: nA level
- Low clamping voltage
- Complies with IEC 61000-4-2 standards:
  - Air discharge: ±15kV
  - Contact discharge: ±8kV
- RoHS Compliant

DFN1610-2





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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	1800	W
Peak Pulse Current (8/20μs)	I_{PP}	120	A
Operating Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	Tstg	−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}			5	V	
Breakdown Voltage	V_{BR}	6			V	I_T = 1mA
Reverse Leakage Current	I_R			1	μA	V_{RWM} = 5V
Clamping Voltage	V_C			8	V	I_{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	V_C			15	V	I_{PP} = 120A (8 x 20μs pulse)
Junction Capacitance	C_J			800	pF	VR = 0V, f = 1MHz

Note: Electrical parameters are only for die, performance may alter after assembly.

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

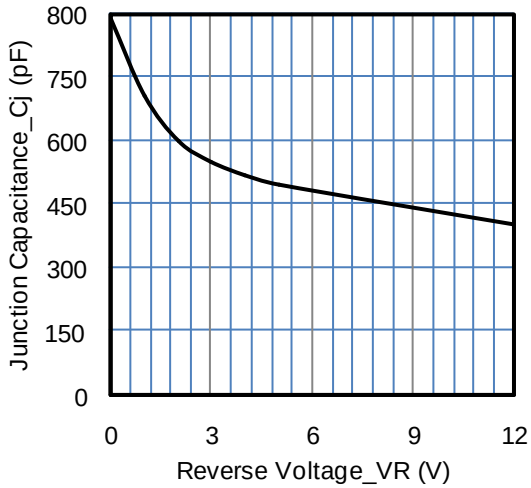


Fig1.Junction Capacitance vs. Reverse Voltage

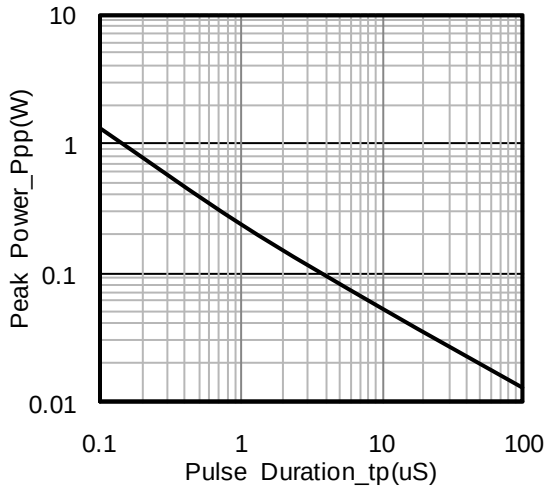


Fig2.Peak Pulse Power vs. Pulse Time

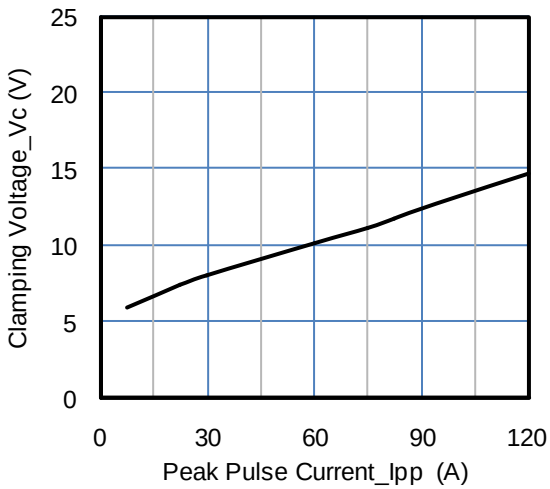


Fig 3 .Clamping Voltage vs. Peak Pulse Current

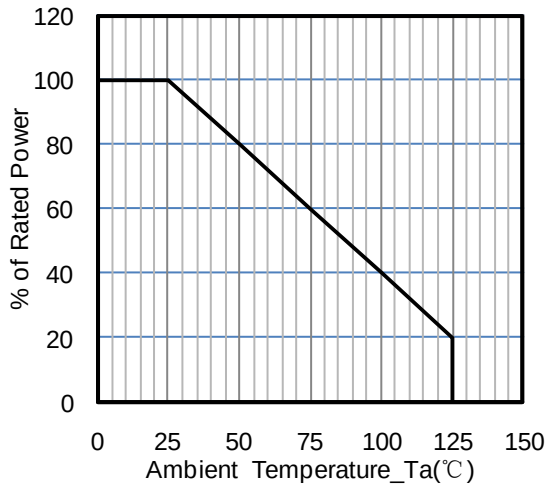


Fig4.Power Derating Curve

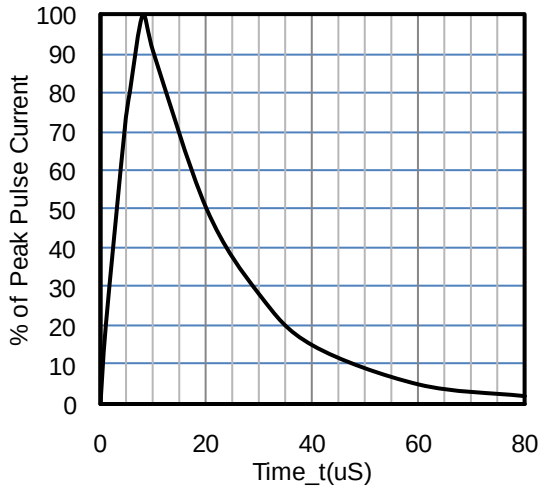


Fig 5. 8 X 20uS Pulse Waveform

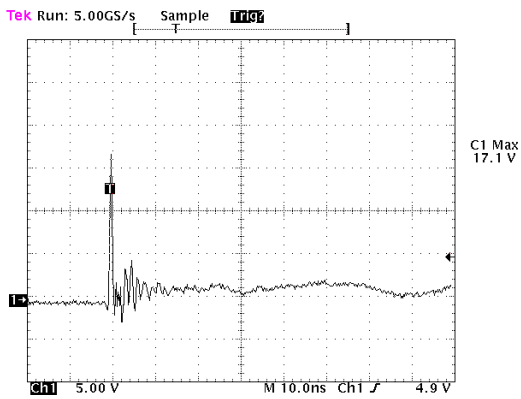
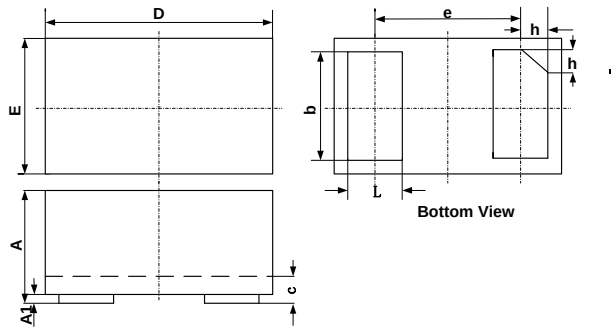


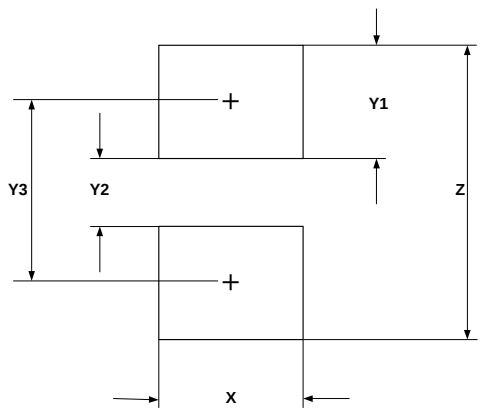
Fig 6. ESD Clamping Voltage
8 kV Contact per IEC61000−4−2

DFN1610-2 Package Outline Drawing



SYM	DIMENSIONS					
	MILLIMETERS			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	0.75	0.80	0.85	0.030	0.032	0.034
c	0.10	0.15	0.20	0.004	0.006	0.008
D	1.55	1.60	1.65	0.062	0.064	0.066
e	1.10 BSC			0.044 BSC		
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
h	0.15	0.20	0.25	0.006	0.008	0.010

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	1.00	0.040
Y1	0.62	0.025
Y2	0.60	0.024
Y3	1.22	0.049
Z	1.85	0.074