

Features

- Protects one data line
- Ultra low leakage: nA level
- Operating voltage: 3.3V
- Ultra low clamping voltage
- 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) 7A (8/20 μs)
- RoHS Compliant

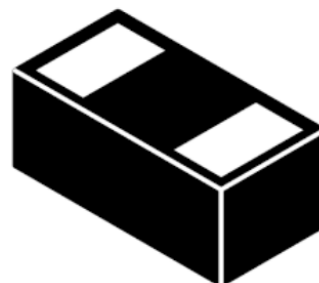
Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, LCD Displays

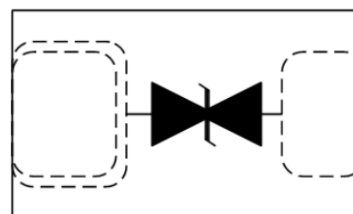
Mechanical Characteristics

- Package: DFN1006-2 (1.0 \times 0.6 \times 0.5mm)
- Case Material: “Green” Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Dimensions DFN1006



Pin Configuration



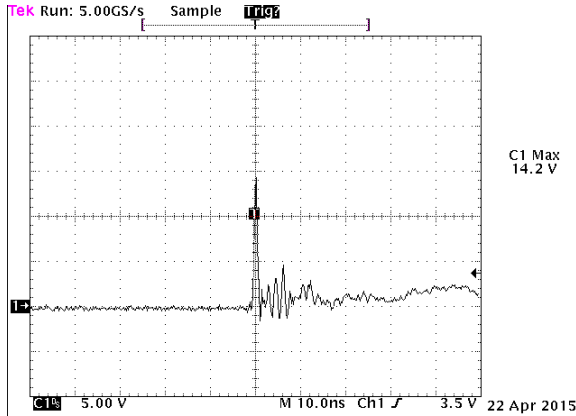
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

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	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

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

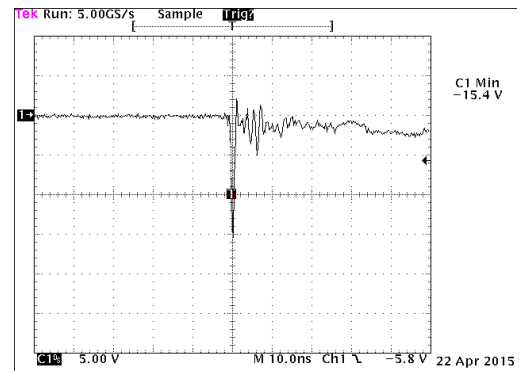
Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I _T (mA)	V _C @1A	V _C		I _R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
ESDA33CP	3X	3.3	3.8	50	4	12	7	0.01	6

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



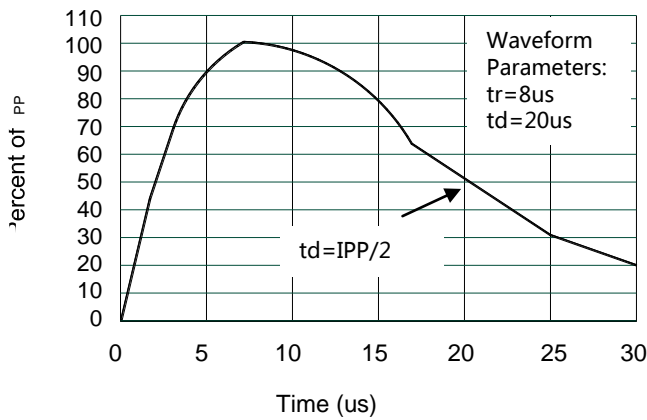
ESD clamp voltage

Positive 8KV IEC61000-4-2 contact discharge

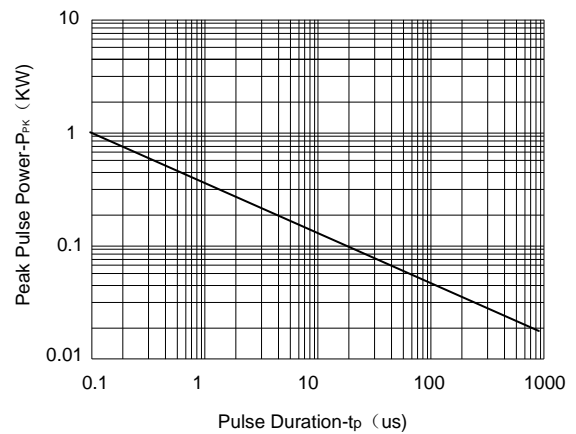


ESD clamp voltage

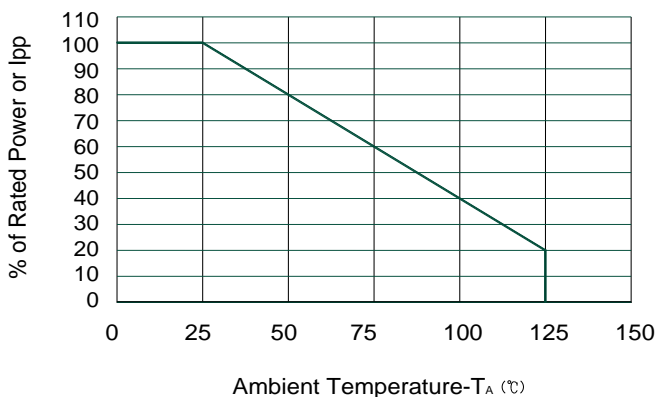
Negative 8KV IEC61000-4-2 contact discharge



Pulse Waveform

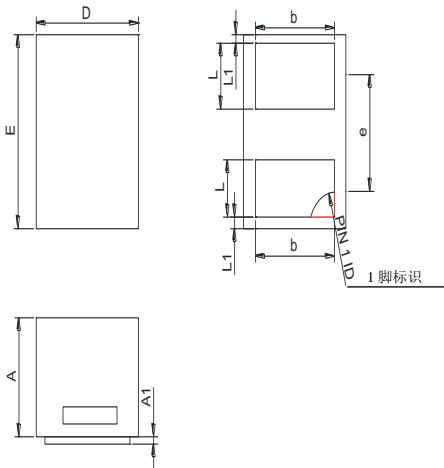


Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve

DNF1006 PACKAGE OUTLINE & DIMENSIONS



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.30	0.50	0.012	0.020
A1	0.00	0.05	0.000	0.002
D	0.55	0.65	0.022	0.026
E	0.95	1.05	0.037	0.041
b	0.25	0.60	0.010	0.024
e	0.65TYP		0.026TYP	
L	0.15	0.35	0.006	0.014
L1	0.05REF		0.002REF	

