

Features

- Ultra low leakage: nA level
- Operating voltage: 2.5V
- 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) 22A (8/20 μs)
- RoHS Compliant

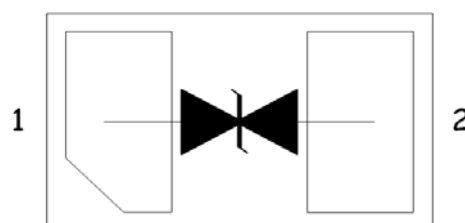
Dimensions DFN1006



Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Computer Interfaces Protection
- Control Signal Lines Protection
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, LCD Displays

Pin Configuration



Mechanical Characteristics

- Package: DFN1006
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 10,000pcs
- Reel Size: 7 inch
- Device Marking: D56

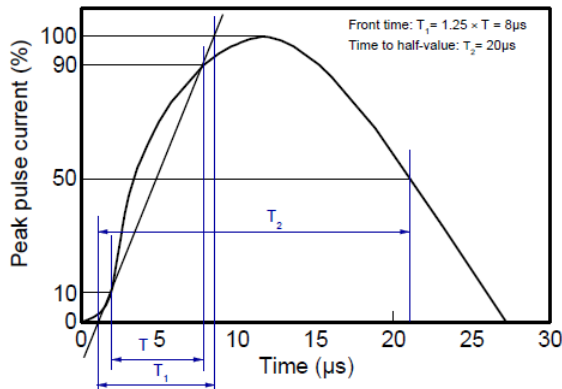
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	310	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 +150	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

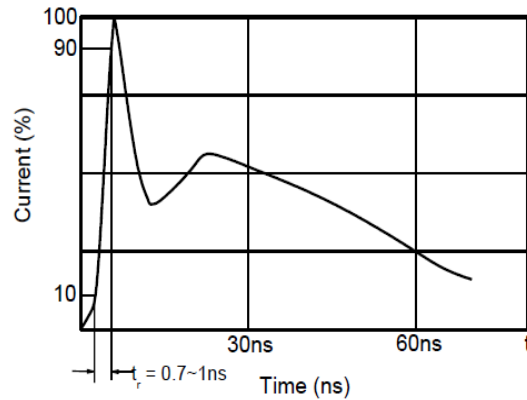
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				2.5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	3		4.2	V
Reverse Leakage Current	I_R	$V_{RWM} = 2.5V$			0.5	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ (8 x 20 μs pulse)			6	V
Clamping Voltage	V_C	$I_{PP} = 22A$ (8 x 20 μs pulse)			14	V
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$			60	pF

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



8/20 μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

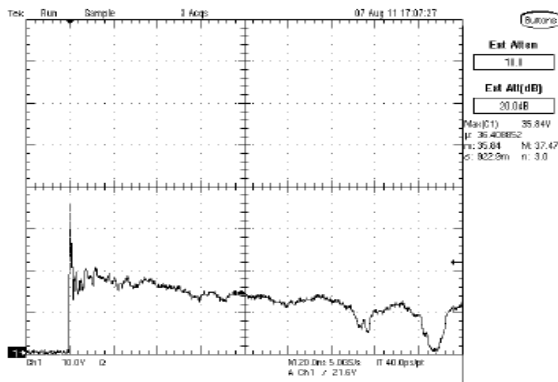


Fig1. ESD Clamping Voltage Screenshot Positive 8 kV Contact per IEC61000-4-2

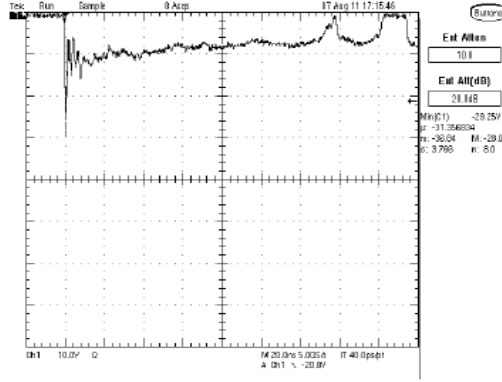
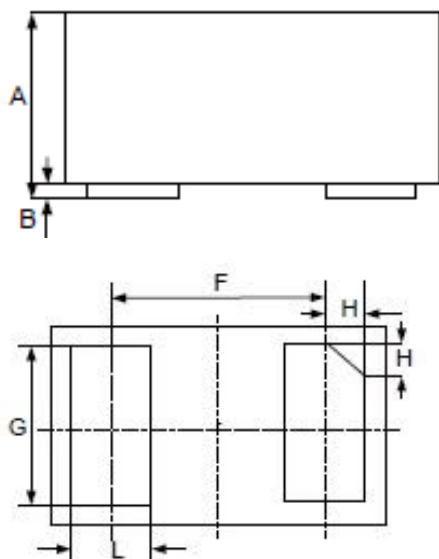


Fig2. ESD Clamping Voltage Screenshot Negative 8 kV Contact per IEC61000-4-2

DFN1006 PACKAGE OUTLINE & DIMENSIONS



DIM	MILIMETER	
	MIN (mm)	MAX (mm)
A	0.34	0.55
B	0	0.05
D	0.95	1.08
E	0.55	0.68
F	0.65(Typ)	
G	0.40	0.60
H	0.07	0.17
L	0.20	0.30