

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

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

Mechanical Characteristics

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

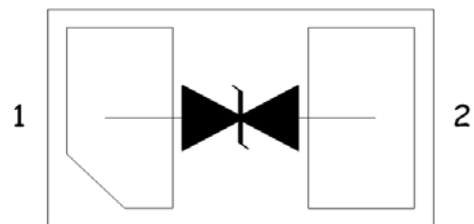
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

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

Dimensions DFN1006



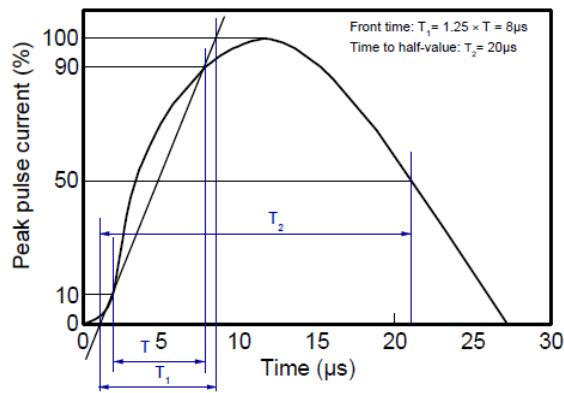
Pin Configuration



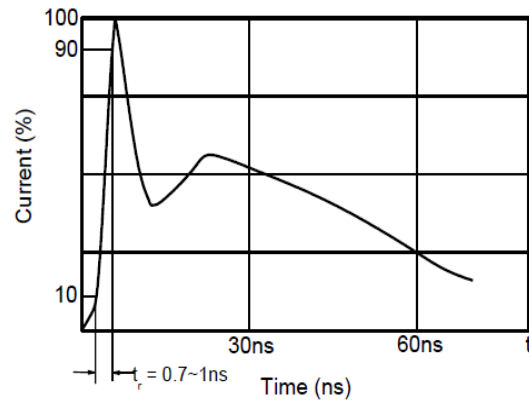
Electrical Characteristics (TA=25°C unless otherwise specified)

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

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



8/20 μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

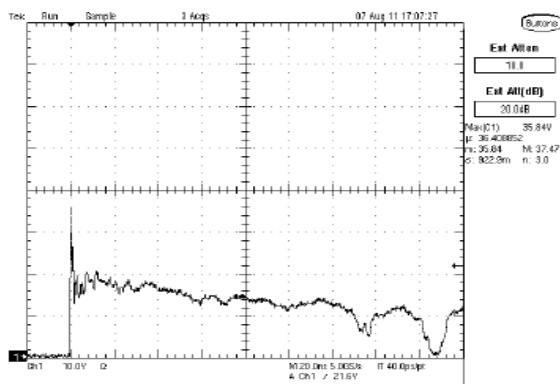


Fig1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

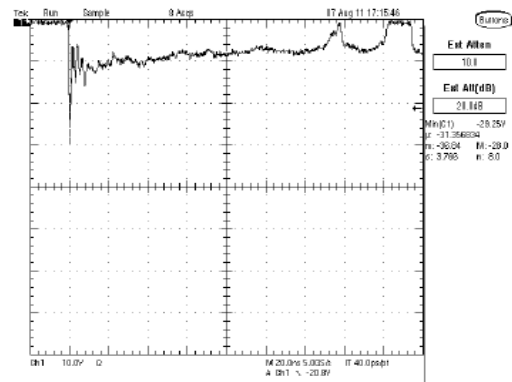
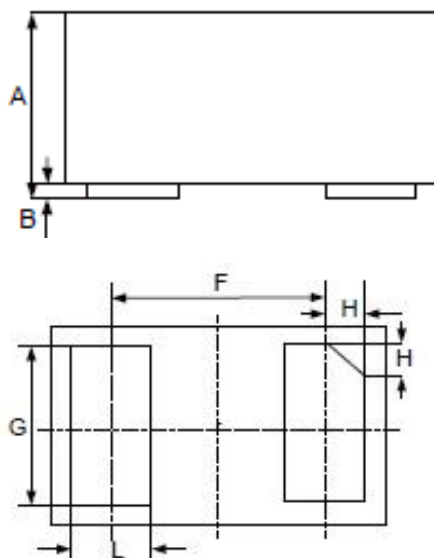


Fig2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

DFN1006 Package Outline Drawing



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

NOTICE

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