

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

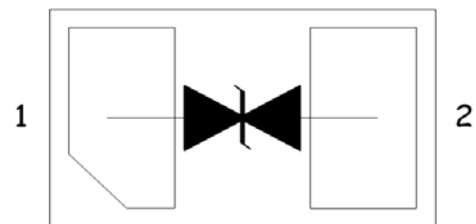
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

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

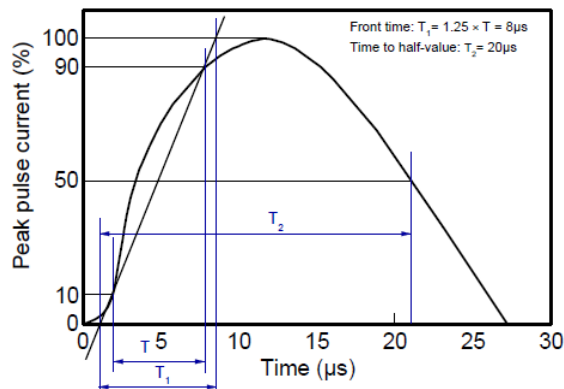


Electrical Characteristics

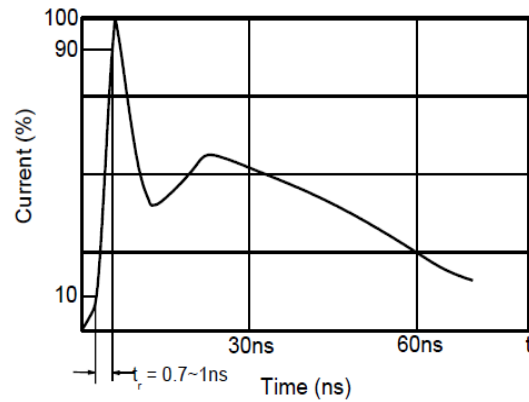
(TA=25°C unless otherwise specified)

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)



8/20μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

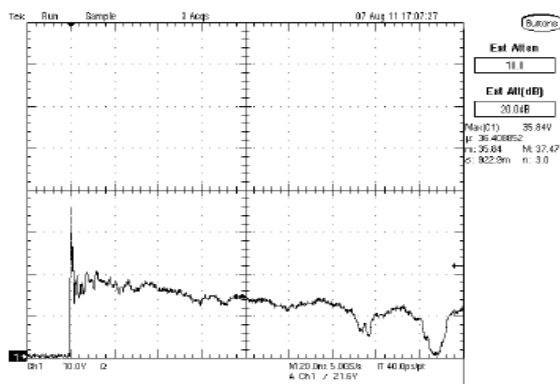


Fig1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

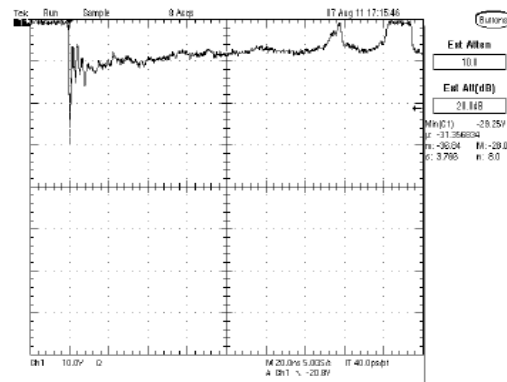
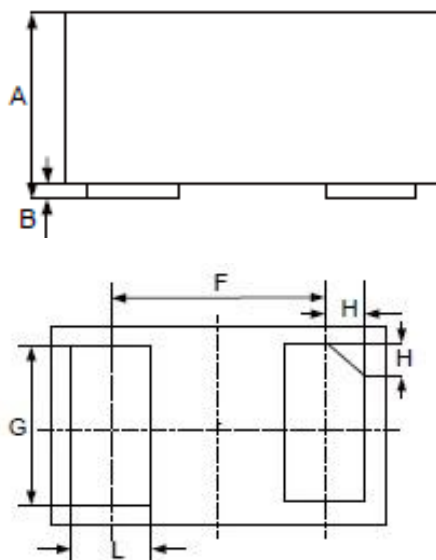


Fig2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

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

Leiditech reserves the right to make modifications,enhancements,improvements,corrections or other changes without further notice to any product herein. Leiditech does not assume any liability arising out of the application or use of any product described herein.

Shanghai Leiditech Electronic Co.,Ltd
 Email: sale1@leiditech.com
 Tel : +86- 021 50828806
 Fax : +86- 021 50477059