

Features

- Ultra low leakage: nA level
- Operating voltage: 3.3V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 8A (8/20 μs)
- RoHS Compliant

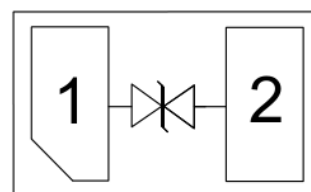
Dimensions DFN0603



Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, USB 2.0, LCD Displays

Pin Configuration



Mechanical Characteristics

- Package: DFN0603
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 10,000 pcs
- Reel Size: 7 inch
- Device Marking: 3A

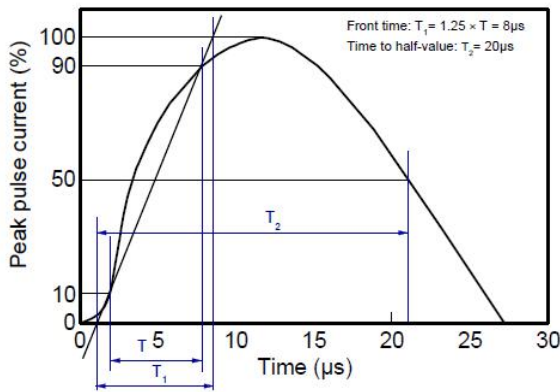
Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	P _{pp}	80	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

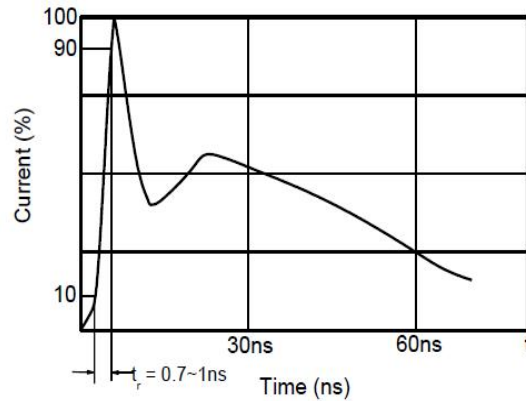
Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				3.3	V
Breakdown Voltage	V_{BR}	$I_T = 1\text{mA}$	3.5			V
Reverse Leakage Current	I_R	$V_{RWM} = 3.3\text{V}$			0.1	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$ (8 x 20 μs pulse)			6.5	V
Clamping Voltage	V_C	$I_{PP} = 8\text{A}$ (8 x 20 μs pulse)			10	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$			20	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

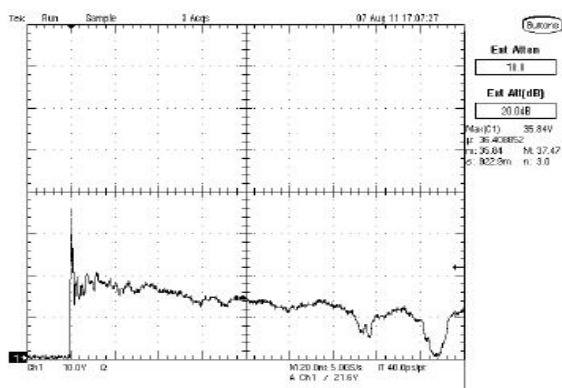


Fig1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

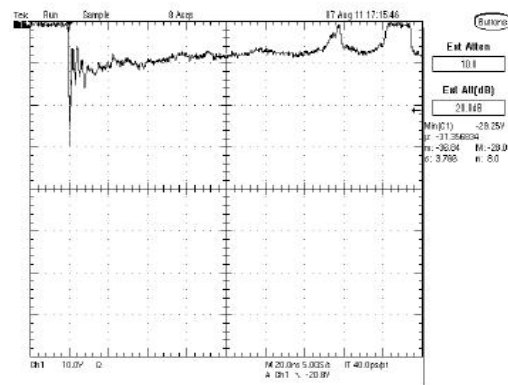
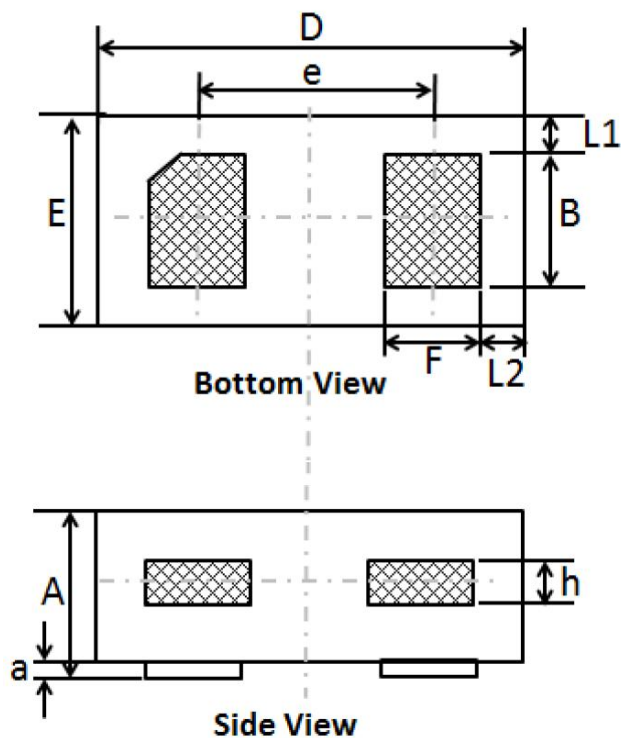


Fig2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

DFN0603 Package Outline Drawing



DIM	MILIMETER	
	MIN (mm)	MAX (mm)
A	0.26	0.35
B	0.20	0.30
D	0.55	0.65
E	0.25	0.35
F	0.13	0.23
L1	0.025BSC	
L2	0.035BSC	
a	0.00	0.05
e	0.35BSC	
h	0.05BSC	