

Features

- Low operating voltage: 5V
- Ultra low capacitance: 0.3pF typical
- Ultra low leakage: nA level
- Low clamping voltage
- -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):5.5A(8/20 μs)
- These are Pb-Free Devices
- Response Time is Typically < 1 ns

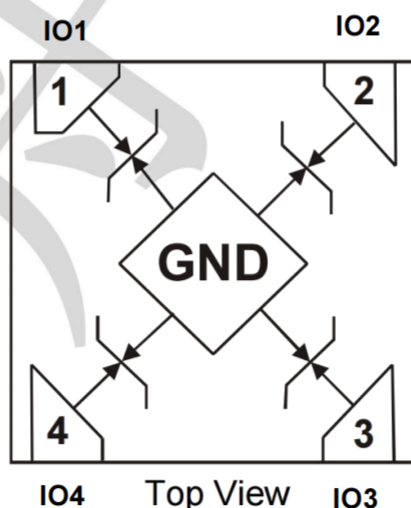
Mechanical Characteristics

- Package: DFN0808-4
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Terminal Connections: See Diagram Below
- - IEC 61000-4-2 (ESD) immunity test

Applications

- Cellular Handsets and Accessories
- Keypads, Side Keys, Audio Ports
- SIM Ports & Digital Lines
- Notebooks and Handhelds

Dimensions and Pin Configuration



Circuit and Pin Schematic

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

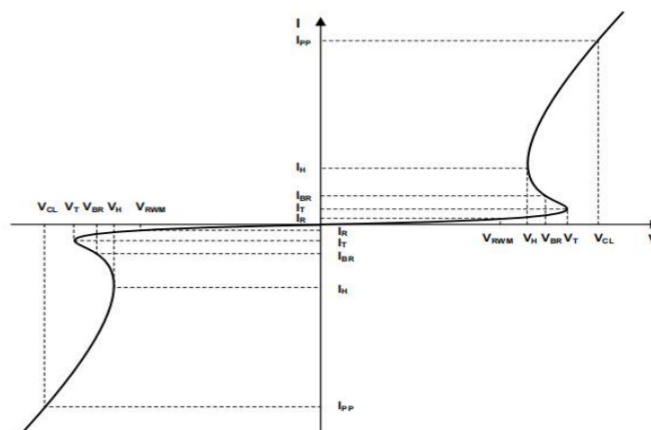
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	55	W
Peak Pulse Current (8/20μs)	Ipp	5.5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±30 ±30	KV
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM	--	--	5	V	Any I/O pin to ground
Breakdown Voltage	VBR	5.8	8.0	9.5	V	IT= 1mA,Any I/O pin to ground
Reverse Leakage Current	IR	--	--	0.2	uA	VRWM=5V,Any I/O pin to ground
Clamping Voltage	VC	--	5.8	7.5	V	Ipp=1A(8x 20us pulse), Any I/O pin to ground
Clamping Voltage	VC	--	8	10	V	Ipp=4A(8x 20us pulse), Any I/O pin to ground
Junction Capacitance	Cvo-GND	--	0.3	0.4	pF	VR=0V,f=1MHz, Any I/O to GND
	Ci/o- I/O	--	0.15	0.2	pF	VR=0V,f=1MHz, between I/O pins

Electrical Characteristics

Symbol	Parameter
V_{BR}	Reverse Breakdown Voltage
I_{BR}	Reverse Breakdown Current
V_{RWM}	Reverse Stand-off Voltage
I_R	Reverse Leakage Current
V_H	Holding Voltage
I_H	Holding Current
V_T	Trigger Voltage
I_T	Trigger Current
I_{PP}	Peak Pulse Current
V_{CL}	Clamping Voltage



Characteristic Curves

Fig1. 8/20 μ s Pulse Waveform

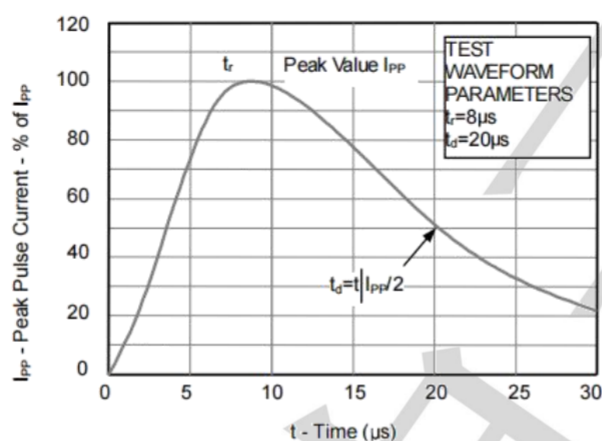


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

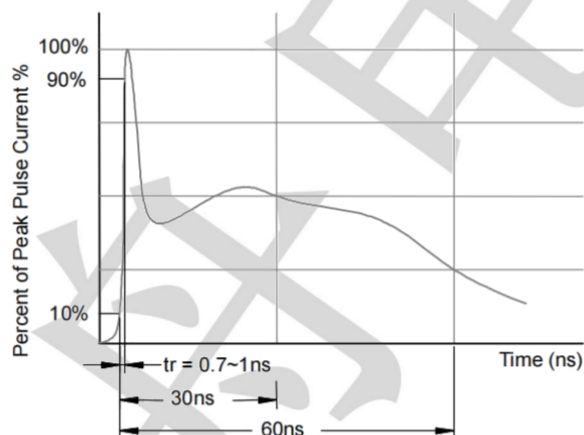
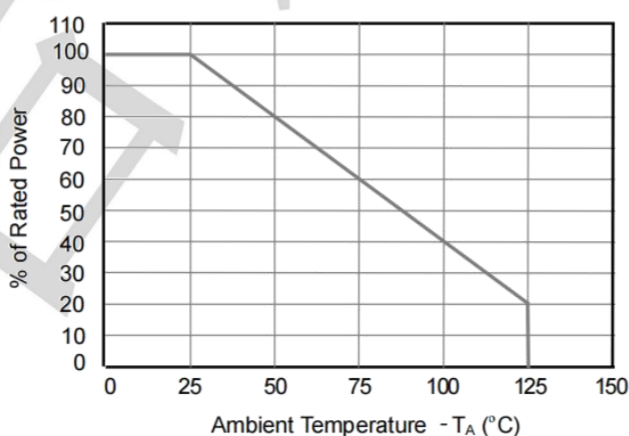
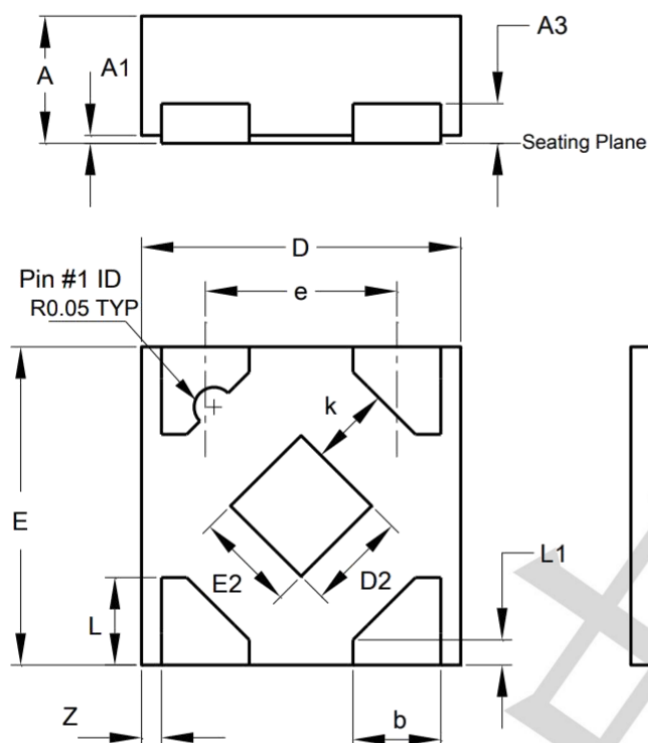


Fig3. Power Derating Curve



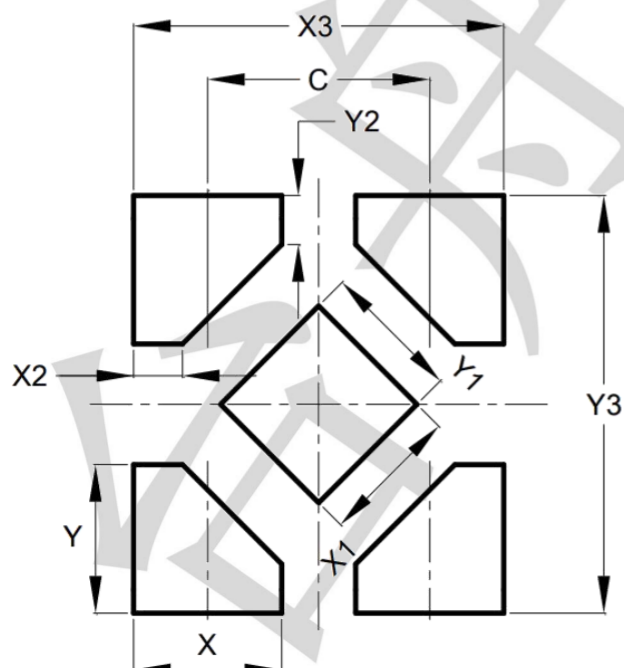
Package information (Unit: mm)

DFN0808-4 (unit: mm)



DFN0808-4			
Dim	Min	Max	Typ
A	0.25	0.35	0.30
A1	0	0.04	0.02
A3	-	-	0.13
b	0.17	0.27	0.22
D	0.75	0.85	0.80
D2	0.15	0.35	0.25
E	0.75	0.85	0.80
E2	0.15	0.35	0.25
e	-	-	0.48
k	0.20	-	-
L	0.17	0.27	0.22
L1	0.02	0.12	0.07
z	-	-	0.05
All Dimensions in mm			

Mounting Pad Layout (unit: mm)



Dimensions	Value
C	0.480
X	0.320
X1	0.300
X2	0.106
X3	0.800
Y	0.320
Y1	0.300
Y2	0.106
Y3	0.900