

Features

- Ultra small package: 0.6x0.3x0.3mm
- Ultra low capacitance: 15pF typical
- Ultra low leakage: nA level
- Low operating voltage: 5V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
- - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 15\text{kV}$
Contact discharge: $\pm 8\text{kV}$
- These are Pb-Free Devices
- Response Time is Typically $< 1\text{ ns}$

Mechanical Characteristics

- Extremely small form factor down to 0.62 x 0.32 x 0.31 mm³(0201)
- Lead Finish: Matta Tin
- Pb-free (RoHS compliant) package

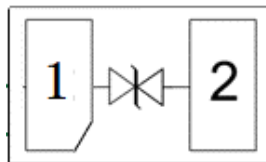
Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals

Ordering Information

Part Number	Qty per Reel	Reel Size
ESD5V0B15-0201	10000	7"

Dimensions and Pin Configuration



Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs)	PPP	80	W
Peak Pulse Current (tp=8/20μs)	I _{PP}	6	A
ESD per IEC 61000-4-2 (Air)	VESD	±15	kV
ESD per IEC 61000-4-2 (Contact)		±8	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	Any I/O pin to ground
Breakdown Voltage	V _{BR}	6			V	I _T = 1mA,
Reverse Leakage Current	I _R			0.2	μA	V _{RWM} = 5V,
Clamping Voltage	V _C			7.5	V	I _{PP} = 1A (8 x 20μs pulse)
Junction Capacitance	C _J		15	18	pF	V _R = 0V, f = 1MHz,

Fig1. 8/20 μ s Pulse Waveform

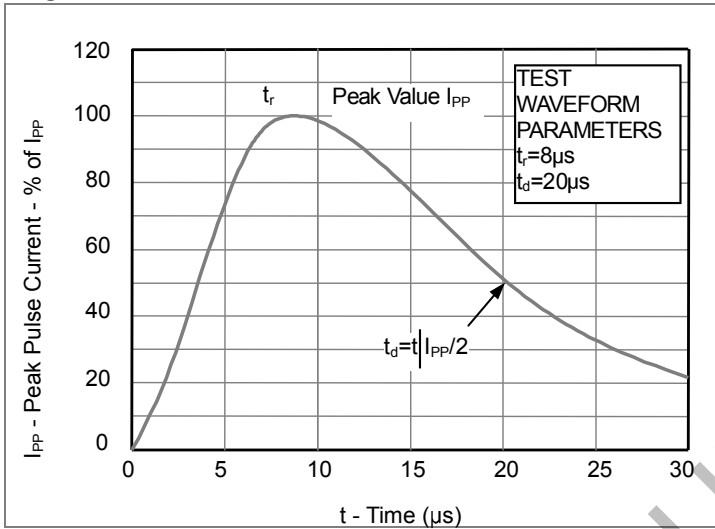


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

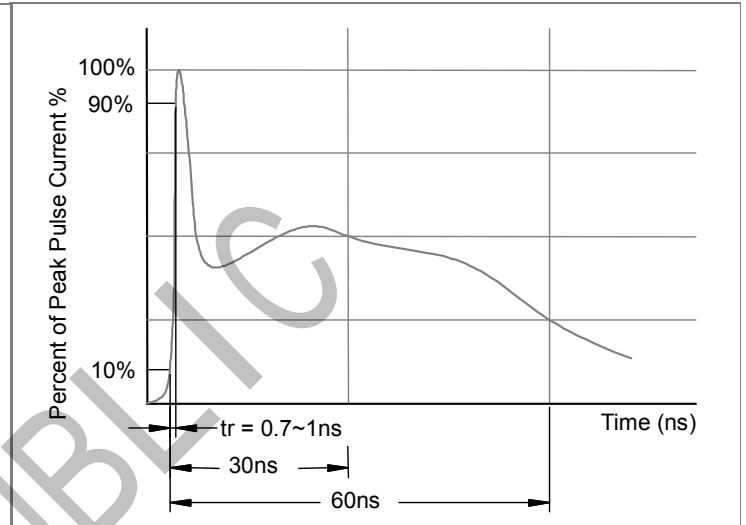
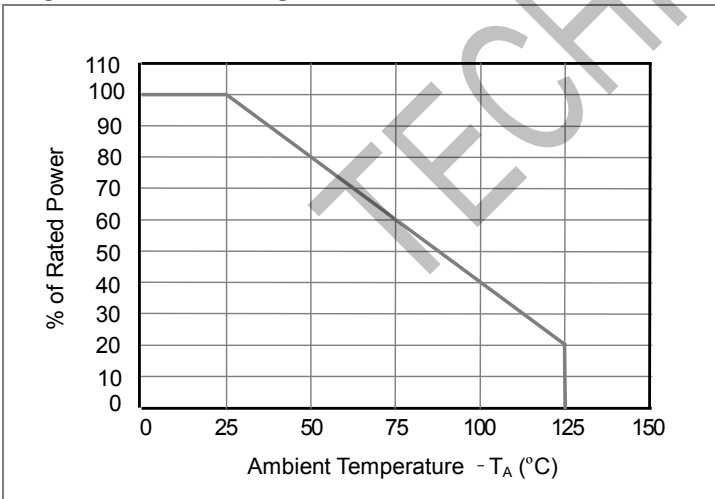
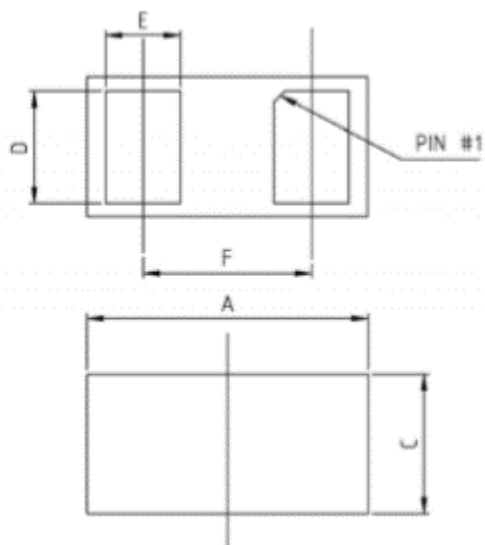


Fig3. Power Derating Curve



Outline Drawing -DFN0603-2L (0201)

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Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	0.58	0.60	0.65
B	0.28	0.30	0.35
C	0.28	0.30	0.34
D	0.20	0.24	0.26
E	0.13	0.16	0.19
F	-	0.36	-