



### 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 mm<sup>3</sup>(0201)
- Lead Finish: Matta Tin
- Pb-free (RoHS compliant) package



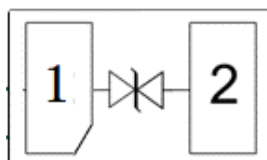
### Applications

- 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



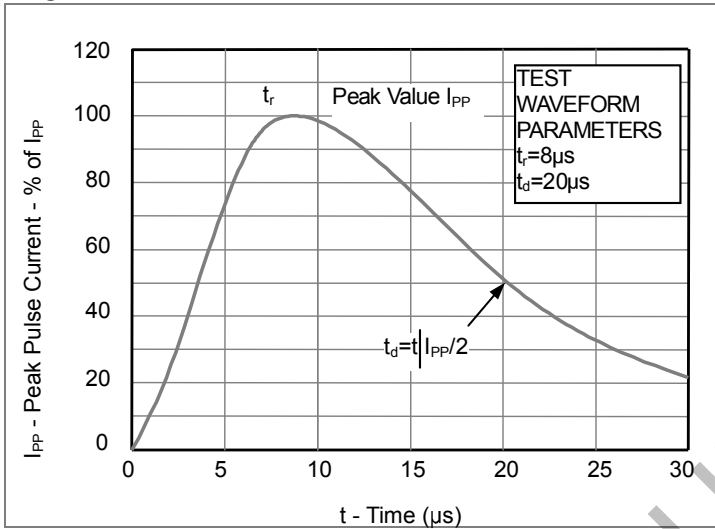
**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

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

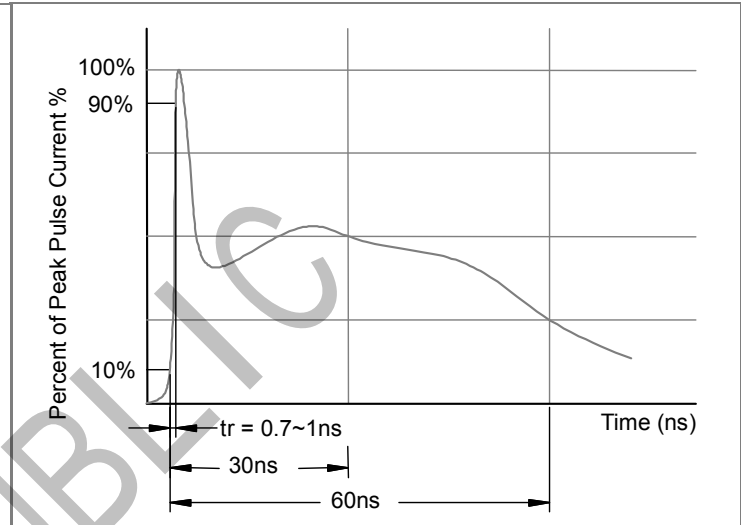
**Electrical Characteristics** (TA=25°C unless otherwise specified)

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

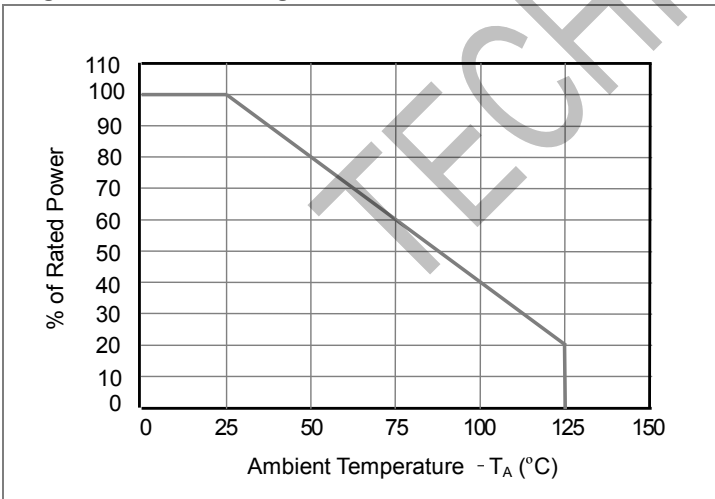
**Fig1. 8/20μs Pulse Waveform**



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

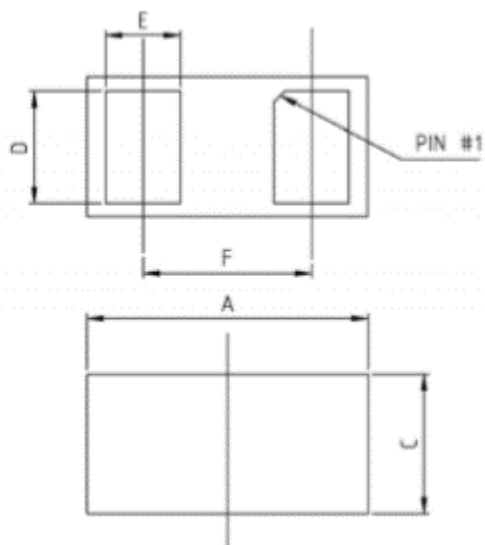


**Fig3. Power Derating Curve**



**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	-