



Features

- Ultra low capacitance: 0.35pF 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: ±20kV
- Contact discharge: ±15kV
- RoHS Compliant
- Lead Finish: NiPdAu

Mechanical Characteristics

- Extremely small form factor down to 0.6 x 0.3 x 0.3 mm³(0201)
- Lead Finish: Matte Tin
- Pb-free (RoHS compliant) package

RoHS



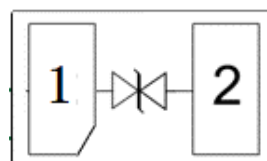
Applications

- Smart phones
- Display Ports
- MDDI Ports
- USB Ports
- Digital Video Interface (DVI)

Ordering Information

Part Number	Qty per Reel	Reel Size
ESD5V0B03-0201	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)	IPP	4	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±20 ±15	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	6		8.5	V	IT = 1mA,
Reverse Leakage Current	IR			0.2	μA	VRWM = 5V,
Clamping Voltage	VC			12	V	IPP = 1A (8 x 20μs pulse)
Junction Capacitance	CJ		0.35	0.45	pF	VR = 0V, f = 1MHz,

Fig1. 8/20 μ s Pulse Waveform

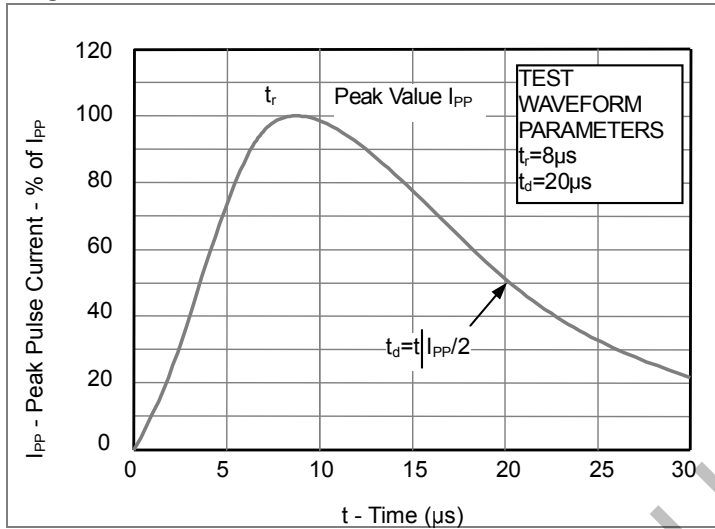


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

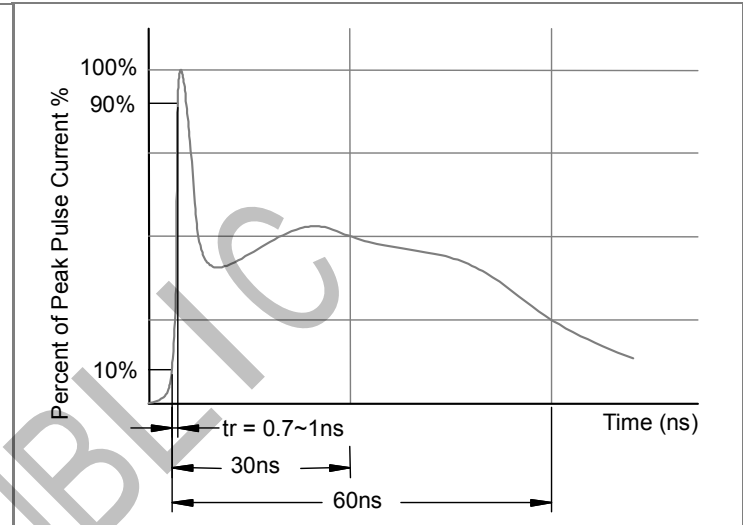
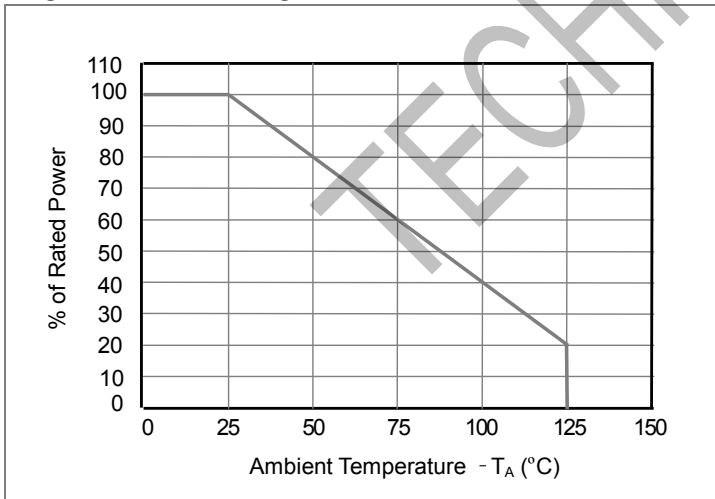
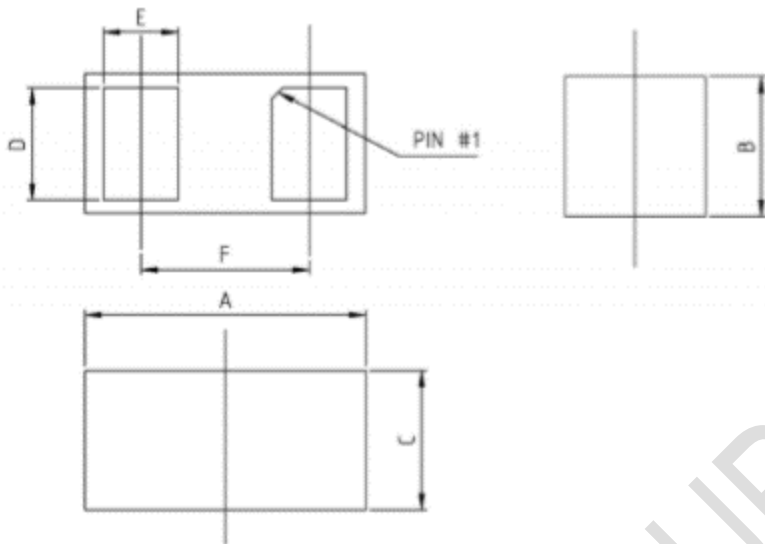


Fig3. Power Derating Curve



Outline Drawing -DFN0603-2L (0201)



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	-

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