

SE05N2S01HZ
Features

- ◆ Working voltages : 5V
- ◆ Low capacitance: 15pF
- ◆ Low leakage current: 0.1uA @ V_{RWM}
- ◆ Low clamping voltage
- ◆ Response Time is < 1 ns

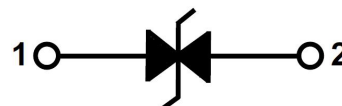
Applications

- ◆ Cell Phone Handsets and Accessories
- ◆ Portable Instrumentation
- ◆ Notebooks, Desktops, and Servers
- ◆ Digital Cameras/MDDI Ports
- ◆ PCI Express

Mechanical Characteristics

- ◆ DFN0603-2L package
- ◆ Molding Compound Flammability Rating: UL 94V-0
- ◆ Quantity Per Reel: 10,000 pcs
- ◆ Reel size: 7 inch

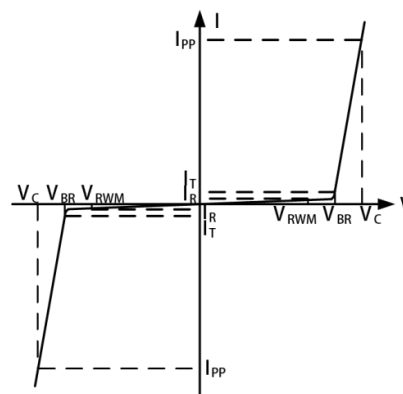
DFN0603

Functional Diagram

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Value	Units
T_J	Operating Temperature Range	-55 to +150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$
V_{ESD}	ESD per IEC61000-4-2 (Air)	± 15	kV
	ESD per IEC61000-4-2 (Contact)	± 8	
T_{LST}	Lead Soldering Temperature	260	$^{\circ}\text{C}$

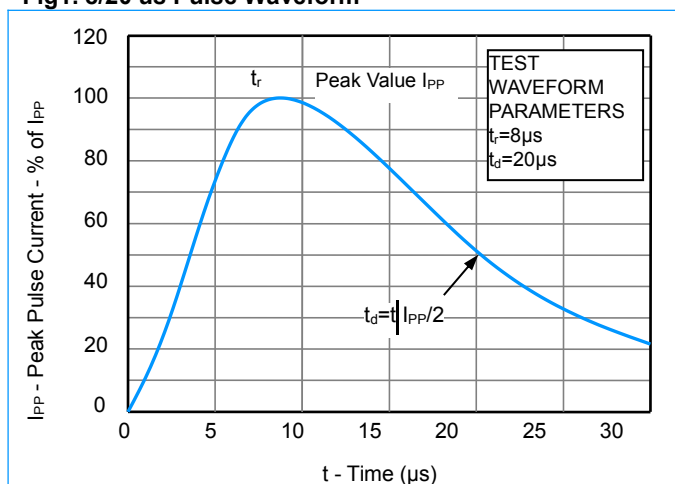
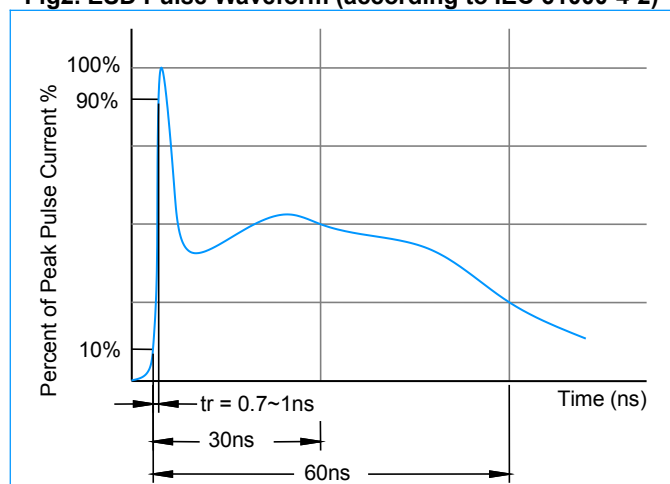
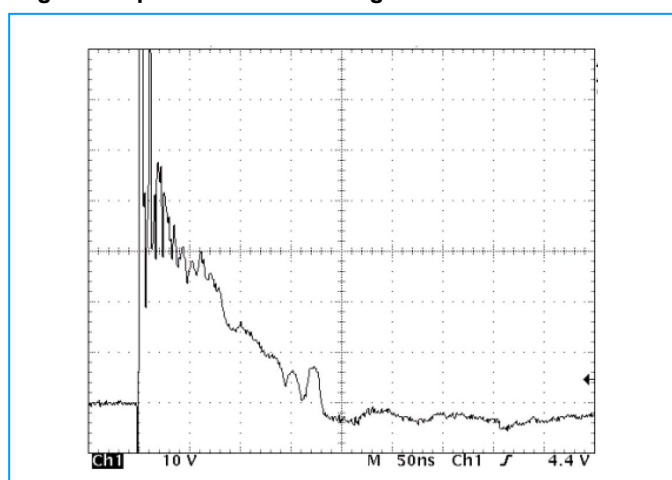
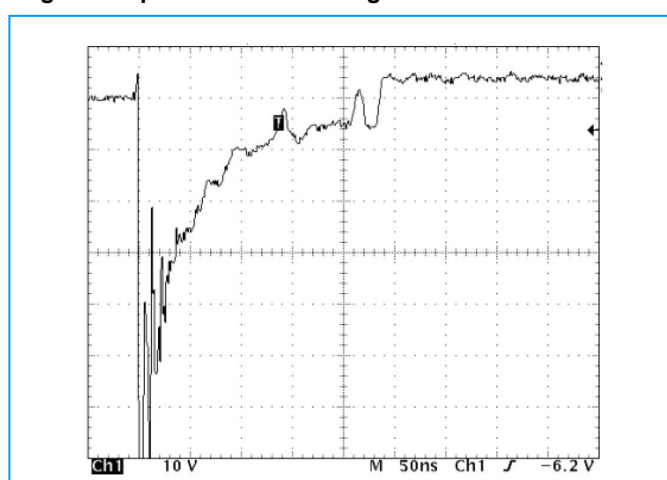
I-V Curve Characteristics

Symbol	Parameter
I_{PP}	Maximum Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current


Bi-Directional TVS

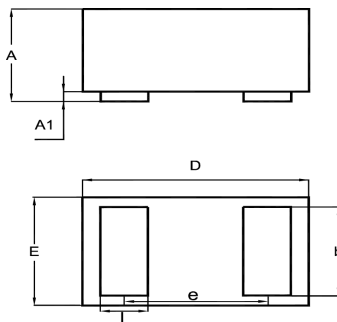
SE05N2S01HZ
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Symbol	Conditions	Min.	Typ.	Max.	Units
V_{RWM}	--	--	--	5.0	V
I_R	$V_{RWM} = 5\text{V}, T = 25^\circ\text{C}$	--	--	0.1	μA
V_{BR}	$I_T = 1\text{mA}$	5.3	6.0	--	V
V_C	$I_{PP} = 1\text{A}, t_P = 8/20\mu\text{s}$	--	7	--	V
V_C	$I_{PP} = 5\text{A}, t_P = 8/20\mu\text{s}$	--	12	--	V
C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	--	15	--	pF

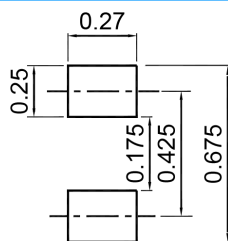
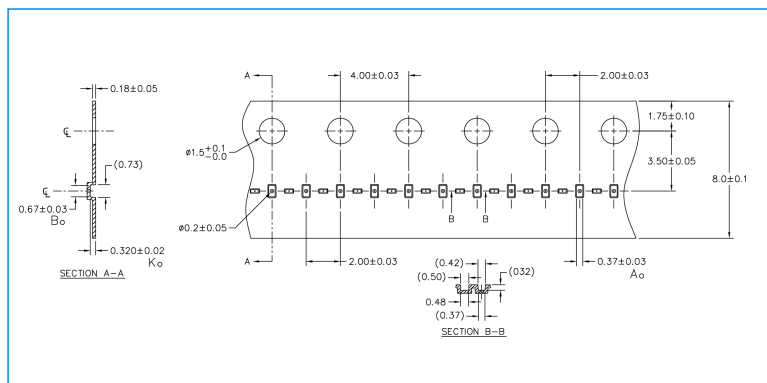
Characteristic Curves
Fig1. 8/20 us Pulse Waveform

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

Fig4. Clamped +8 kV ESD Voltage Waveform

Fig5. Clamped -8 kV ESD Voltage Waveform


SE05N2S01HZ
Package Outline

Plastic surface mounted package; 2 leads DFN0603



UNIT	A	A1	b	D	E	e	L
mm	0.27 0.33	0 0.025	0.21 0.29	0.57 0.65	0.28 0.35	0.355	0.14 0.22

Recommended Soldering Footprint

Tape and Reel Specification


A0	B0	K0
0.37 +/-0.03	0.67 +/-0.03	0.32 +/-0.02mm