Transient Voltage Suppressors for ESD Protection

SE05N2C01GZ

Features

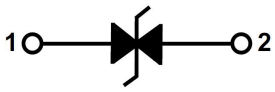
- Working voltage : 5V
- Low capacitance: 0.6pF (Typical)
- Low leakage current: 1.0μA @ V_{RWM}
- Low clamping voltage
- Response Time is < 1 ns

DFN0603

Applications

- Cell Phone Handsets and Accessories
- Portable Instrumentation
- Notebooks, Desktops, and Servers
- Digital CamerasMDDI Ports

Circuit Diagram



Mechanical Characteristics

- DFN0603 Package
- Molding Compound Flammability Rating : UL 94V-0
- Quantity Per Reel : 10,000pcs
- Reel Size : 7 inch
- Marking Code: *D

Absolute Maximum Rating

Symbol	Parameter	Value	Units
I_{PP}	**Peak Pulse Current (8/20μs Waveform)**	4	A
V_{ESD}	**ESD per IEC 61000-4-2 (Air)** **ESD per IEC 61000-4-2 (Contact)**	±20 ±15	KV
T_J	**Operating Temperature**	-55 to +125	℃
T_{STG}	**Storage Temperature**	-55 to +150	℃

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Electrical Characteristics (@ T_A=25℃ Unless Otherwise Specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	--	--	--	5.0	V
Reverse Breakdown Voltage	V_{BR}	I_T = 1mA	6.5	--	9.0	V
Reverse Leakage Current	I_R	V_R = 5V	--	--	1.0	μA
Clamping Voltage	V_C	I_{PP} = 1A	--	9.5	--	V
		I_{PP} = 4A	--	15.0	--	V
Off State Junction Capacitance	C_J	V_R=0V, f=1MHz	--	0.6	--	pF

Characteristic Curves

Fig1. 8/20μs Pulse Waveform

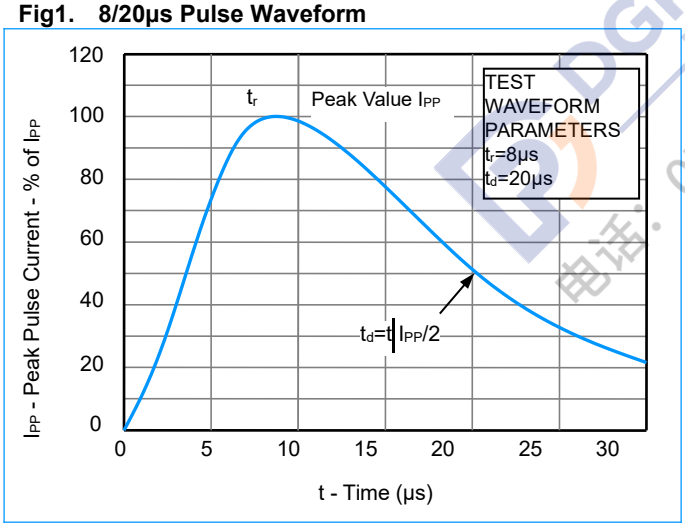


Fig2. ESD Pulse Waveform (according to IEC61000-4-2)

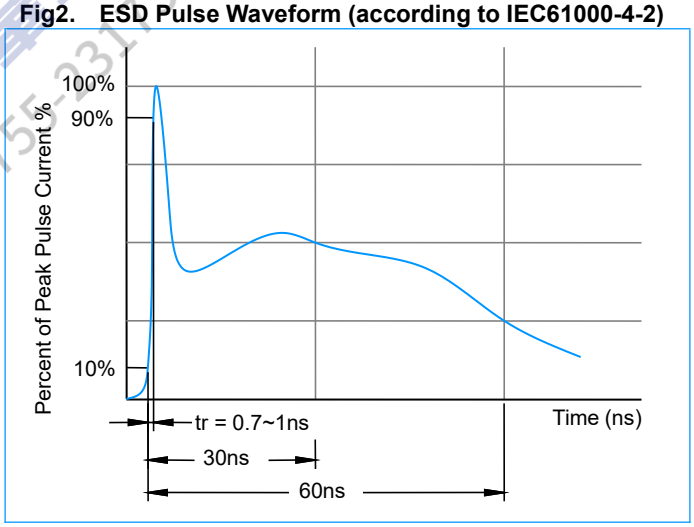


Fig3. Clamped +8 kV ESD Voltage Waveform

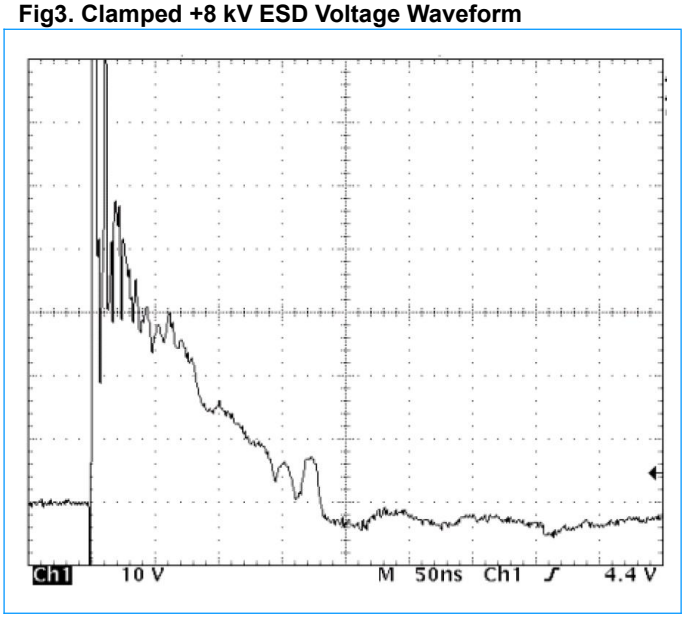
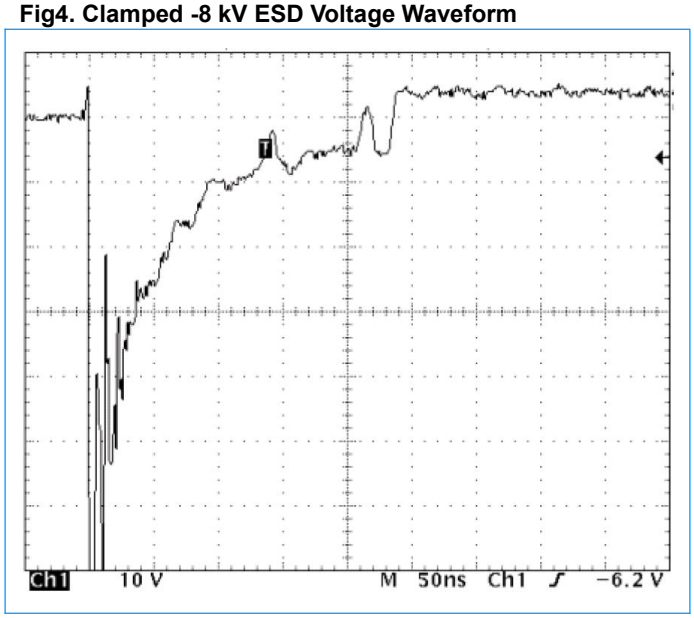


Fig4. Clamped -8 kV ESD Voltage Waveform



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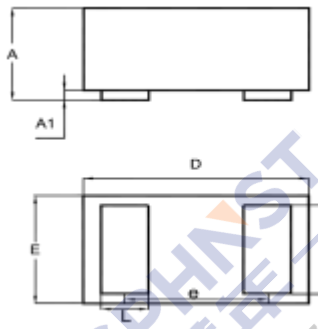
DFN0603-2L Package Outline & Dimensions

Plastic surface mounted package; 2 leads DFN0603



Unit		A	A1	b	D	E	e	L
mm	Min.	0.27	0.000	0.21	0.57	0.28	0.355	0.14
	Max.	0.33	0.025	0.29	0.65	0.35		0.22

Recommended Soldering Footprint (Unit: mm)