

**SE07N6S41GZ**
**Features**

- ◆ Operating Voltage: 7.0V
- ◆ Low Leakage: nA Level
- ◆ Low Capacitance
- ◆ Extremely-Low Clamping Voltage
- ◆ RoHS compliant

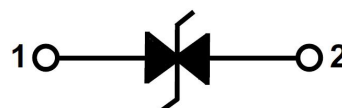
**Applications**

- ◆ Cellular Handsets & Accessories
- ◆ Digital Visual Interface (DVI)
- ◆ RF Circuits
- ◆ Display Port
- ◆ USB Ports

**DFN1006-2L**

**Mechanical Characteristics**

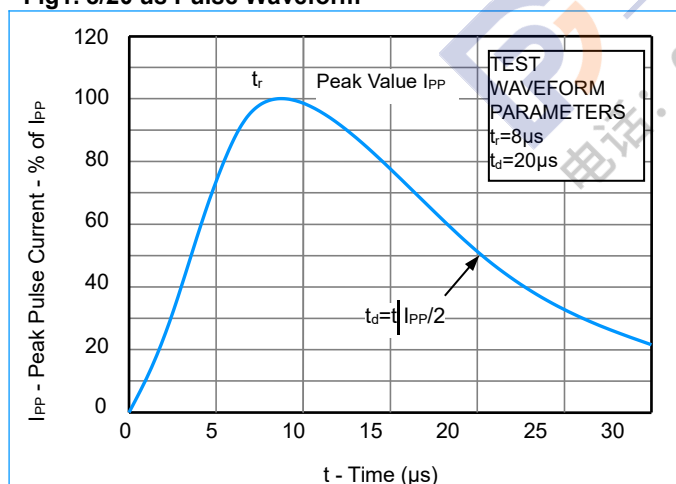
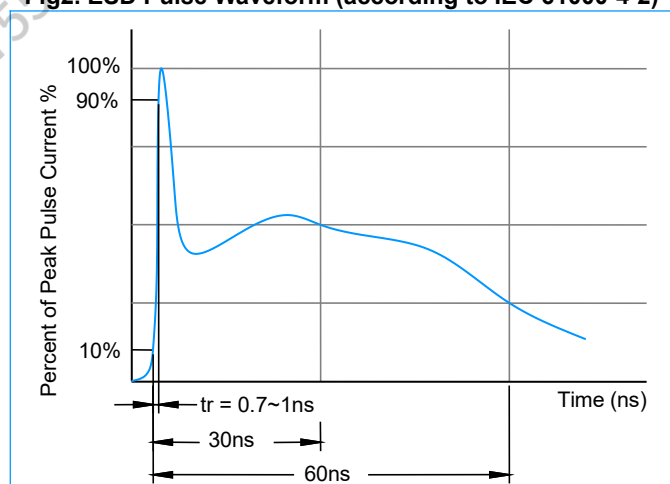
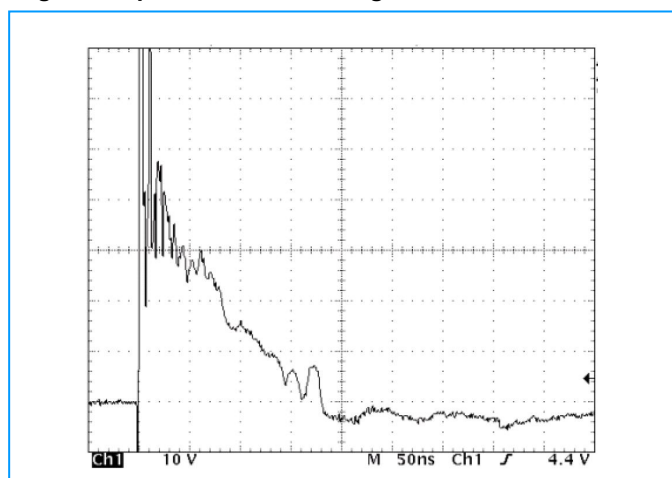
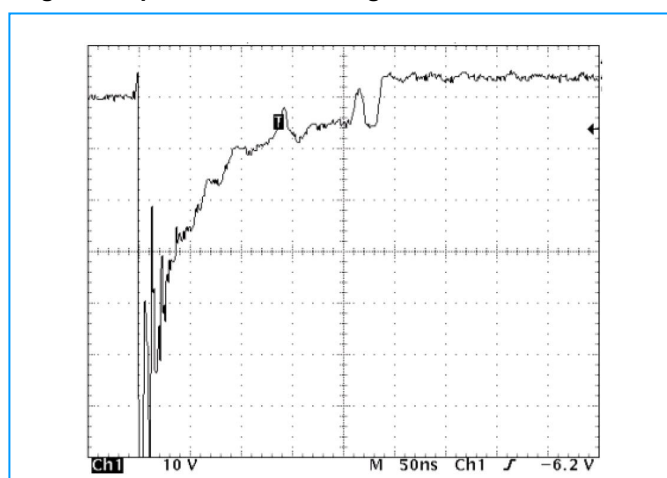
- ◆ DFN1006-2L (1.0x0.6x0.5mm) Package
- ◆ Weight 0.5 Milligrams (Approximate)
- ◆ Quantity Per Reel : 10,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free
- ◆ Marking Code:G

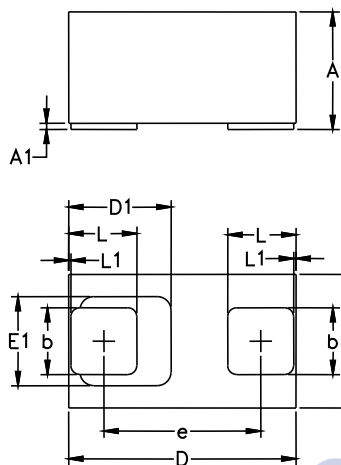
**Functional Diagram**

**Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise specified)**

Symbol	Parameter	Value	Units
T <sub>J</sub>	Operating Temperature Range	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C
V <sub>ESD</sub>	ESD per IEC61000-4-2 (Air)	±25	kV
	ESD per IEC61000-4-2 (Contact)	±25	

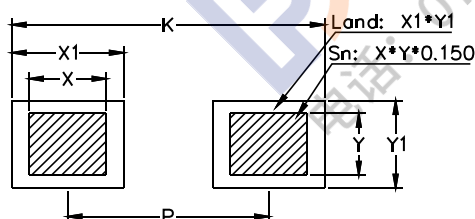
**SE07N6S41GZ**
**Electrical Characteristics ( $T_A = 25^\circ\text{C}$  unless otherwise specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$	--	--	--	7.0	V
Breakdown Voltage	$V_{BR}$	$I_T = 1\text{mA}$	7.6	--	9.0	V
Leakage Current	$I_R$	$V_{RWM} = \pm 7.0\text{V}$	--	--	0.1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP} = 1\text{A}$ , $t_P = 8/20\mu\text{s}$	--	9	12	V
Clamping Voltage	$V_C$	$I_{PP} = 6.5\text{A}$ , $t_P = 8/20\mu\text{s}$	--	10	16	V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$	--	15	20	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**


**SE07N6S41GZ**
**DFN1006-2L Package Outline & Dimensions**


Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
<b>A</b>	0.450	0.550	0.018	0.022
<b>A1</b>	0.010	0.070	0.000	0.003
<b>D</b>	0.950	1.050	0.037	0.041
<b>E</b>	0.550	0.650	0.022	0.026
<b>D1</b>	0.450 REF		0.018 REF	
<b>E1</b>	0.400 REF		0.016 REF	
<b>b</b>	0.275	0.325	0.011	0.013
<b>e</b>	0.675	0.725	0.027	0.029
<b>L</b>	0.275	0.325	0.011	0.013
<b>L1</b>	0.010 REF		0.000 REF	

**Soldering Footprint**


Symbol	Millimeters	Inches
<b>K</b>	1.4±0.05	0.055±0.002
<b>P</b>	0.9±0.025	0.035±0.001
<b>X</b>	0.354±0.025	0.014±0.001
<b>Y</b>	0.283±0.025	0.011±0.001
<b>X1</b>	0.5±0.025	0.020±0.001
<b>Y1</b>	0.4±0.025	0.016±0.001