

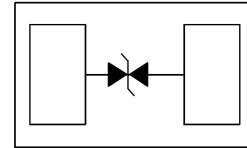
SE18N6C01HJ
Features

- ◆ Stand-off voltage: 18V Max.
- ◆ Transient protection for each line according to
IEC61000-4-2(ESD): $\pm 25\text{kV}$ (contact)
IEC61000-4-5(surge): 4A (8/20 μs)
- ◆ Ultra-low capacitance: $C_J = 0.55\text{ pF}$ (typ.)
- ◆ Ultra-low leakage current: $I_R = 0.1\mu\text{A}$ (Max.)
- ◆ Solid-state silicon technology

DFN1006-2L

Applications

- ◆ USB 2.0 and USB 3.0
- ◆ HDMI 1.3, HDMI 1.4 and HDMI 2.0
- ◆ SATA and eSATA interface
- ◆ DVI
- ◆ IEEE 1394
- ◆ Portable Electronics and Notebooks

Pin Configuration

Mechanical Characteristics

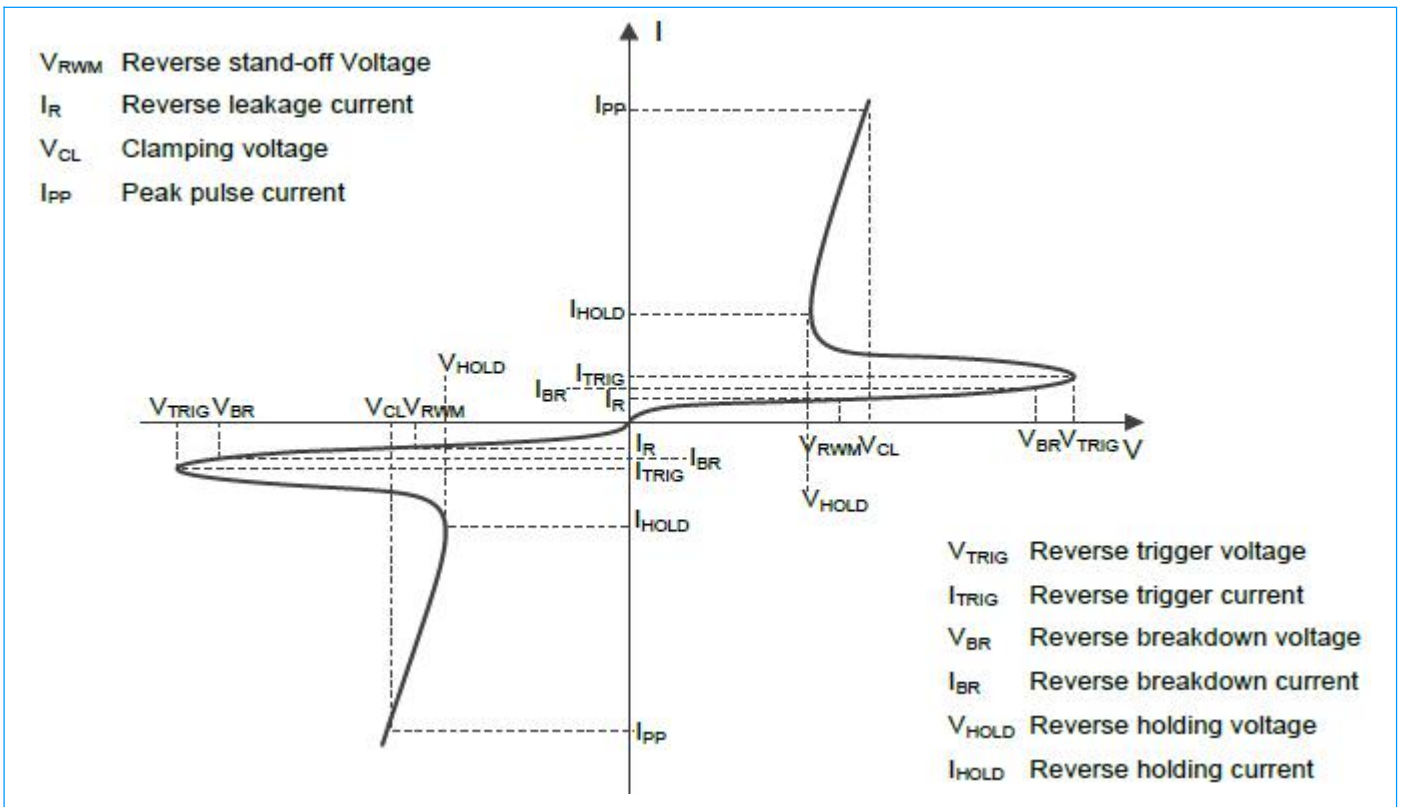
- ◆ DFN1006-2L Package
- ◆ Quantity Per Reel : 10,000pcs
- ◆ Reel Size : 7 inch
- ◆ Lead Finish : Lead Free
- ◆ Marking Code: 8U

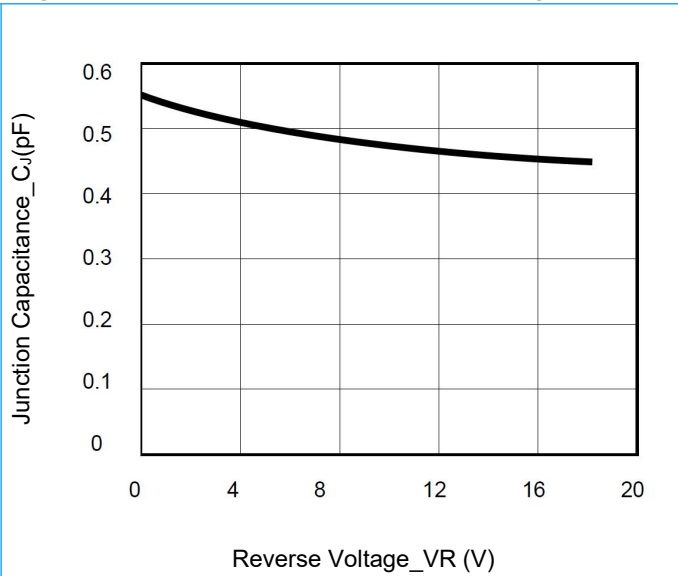
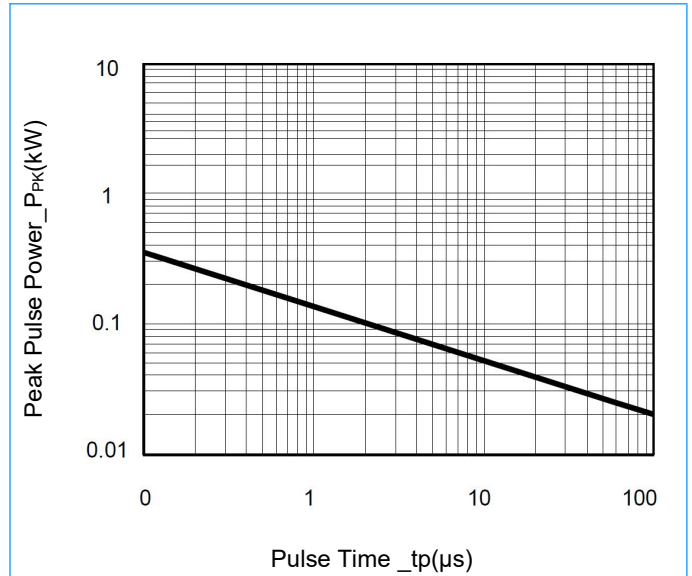
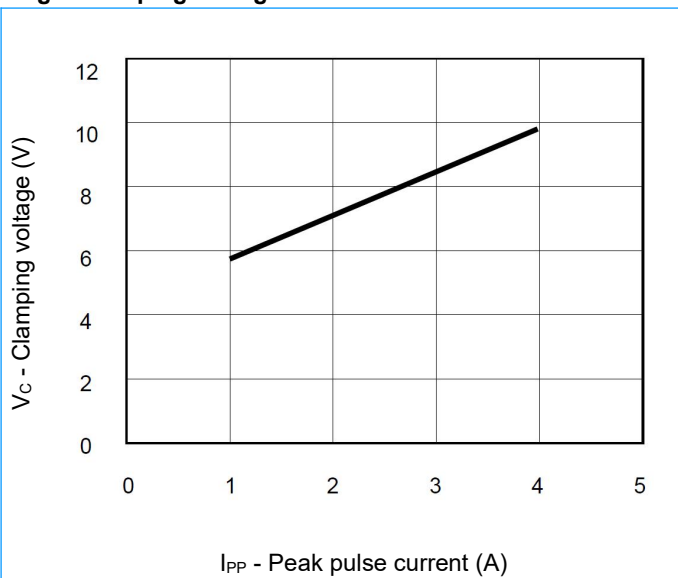
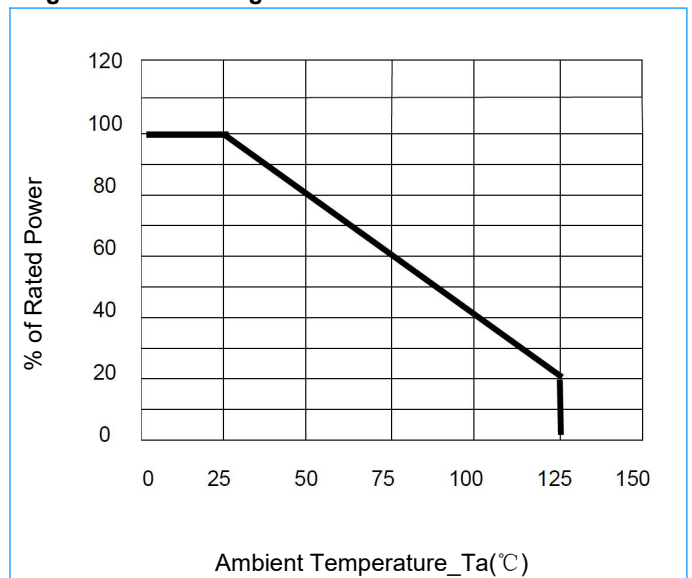
Absolute Maximum Ratings

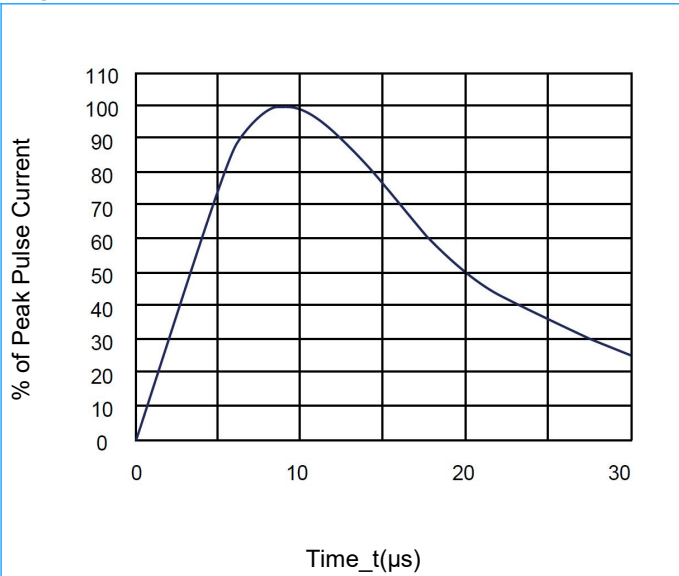
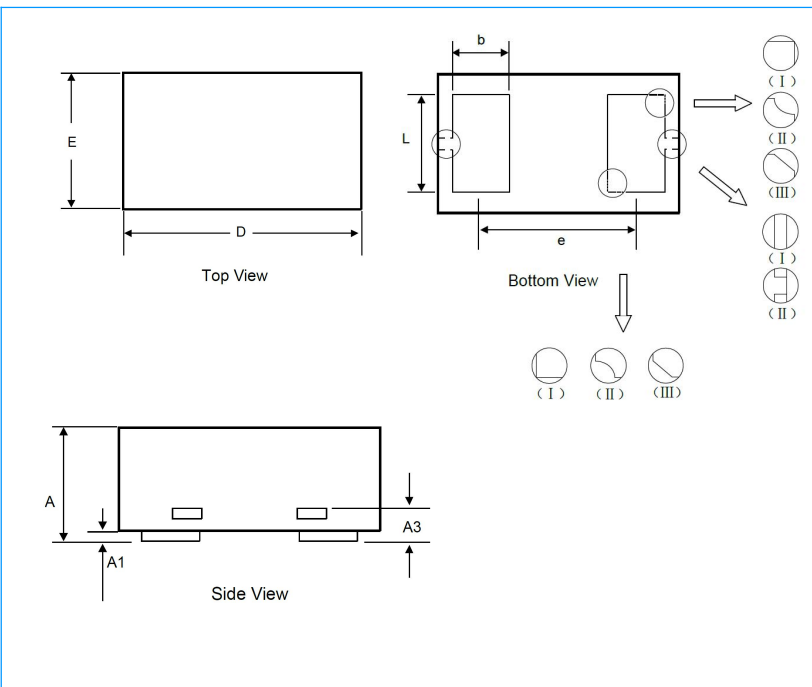
Symbol	Parameter	Value	Units
P_{PK}	Peak pulse power ($t_P=8/20\mu\text{s}$)	40	W
I_{PP}	Peak pulse current ($t_P=8/20\mu\text{s}$)	4	A
V_{ESD}	ESD according to IEC61000-4-2 air discharge	± 25	kV
	ESD according to IEC61000-4-2 contact discharge	± 25	
T_{OP}	Operating Temperature	-40 ~ +85	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-40 ~ +125	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse maximum working voltage	V_{RWM}	--	--	--	18	V
Reverse breakdown voltage	V_{BR}	$I_T = 1\text{mA}$	18.2	18.5	--	V
Reverse leakage current	I_R	$V_{RWM} = 18\text{V}$	--	--	0.1	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_P = 8/20\mu\text{s}$	--	--	6	V
Clamping Voltage	V_C	$I_{PP} = 4\text{A}$, $t_P = 8/20\mu\text{s}$	--	--	10	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	--	0.55	--	pF

Electrical Characteristic Curves ($T_A = 25^\circ\text{C}$, unless otherwise noted)


Typical Characteristic Curves ($T_A = 25^\circ\text{C}$, unless otherwise noted)
Fig1. Junction Capacitance vs. Reverse Voltage

Fig2. Peak Pulse Power vs. Pulse Time

Fig3. Clamping Voltage vs. Peak Pulse Current

Fig4. Power Derating Curve


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Typical Characteristic Curves ($T_A = 25^\circ\text{C}$, unless otherwise noted) (Continue)
Fig5. 8/20 μs Pulse Waveform

DFN1006-2L Package Outline & Dimensions (Unit: mm)


Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.340	0.450	0.530
A1	0.000	0.020	0.050
A3	0.125 Ref.		
D	0.950	1.000	1.075
E	0.490	0.600	0.675
b	0.200	0.250	0.300
L	0.450	0.500	0.550
e	0.650 BSC		