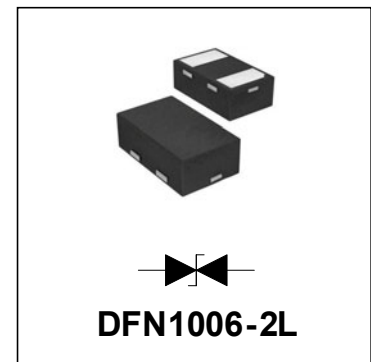


Features

- Protects one I/O or power line
- Low Clamping Voltage
- Ultra Low Capacitance:0.35pF
- Working Voltage: 5 V
- Low Leakage Current



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (air), $\pm 20\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4.5A (8/20 μs)

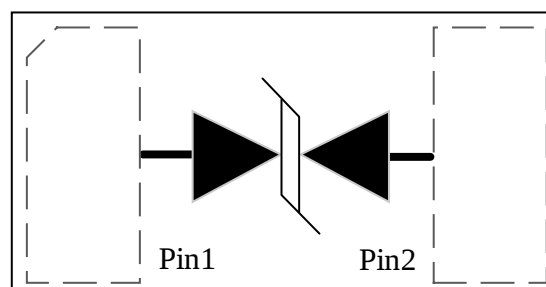
Applications

- Smart Phone
- Laptop
- Wearable
- LCD TV
- USB 3.0/3.1
- PCI Express
- HDMI 1.3/1.4/2.0
- DVI

Mechanical Characteristics

- DFN-2L package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

Schematic & PIN Configuration

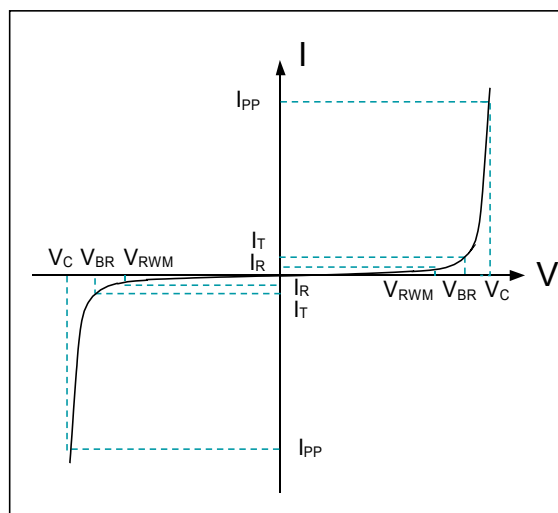


Absolute Maximum Rating

Rating	Symbol	Value	Units
Electrostatic discharge Voltage (See Note1 ,2)	V_{ESD}	20 (contact)	KV
		20 (air)	
Operating Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse 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



Note: 8/20μs pulse waveform.

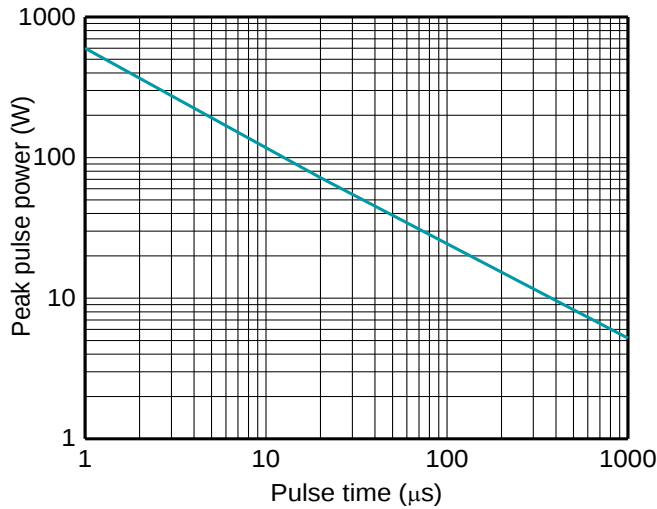
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0		9.5	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$			0.1	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$			4.5	A
Clamping Voltage	V_C	$I_{PP}=4.5A, t_p=8/20\mu s$			22	V
Junction Capacitance	C_j	IO to IO $V_R = 0V, f = 1MHz$		0.35	0.45	pF

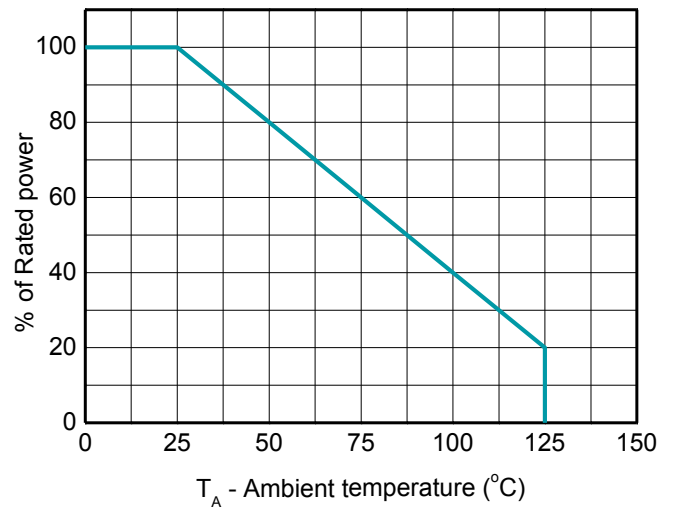
Note1: ESD Pulse Waveform according to IEC 61000-4-2. see Table1 and Figure4.

Note2: ESD tests Setup see Figure 5.

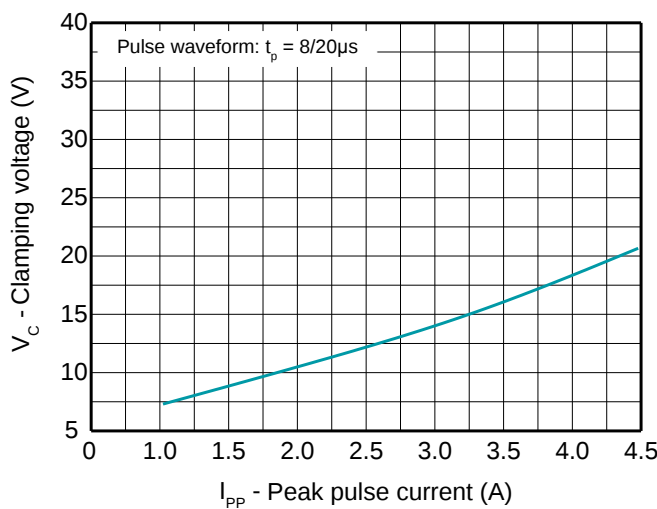
Typical Characteristics



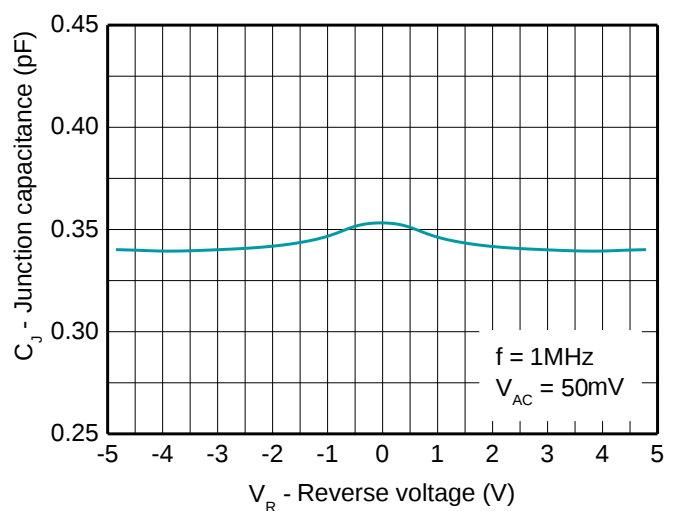
Non-repetitive peak pulse power vs. Pulse time



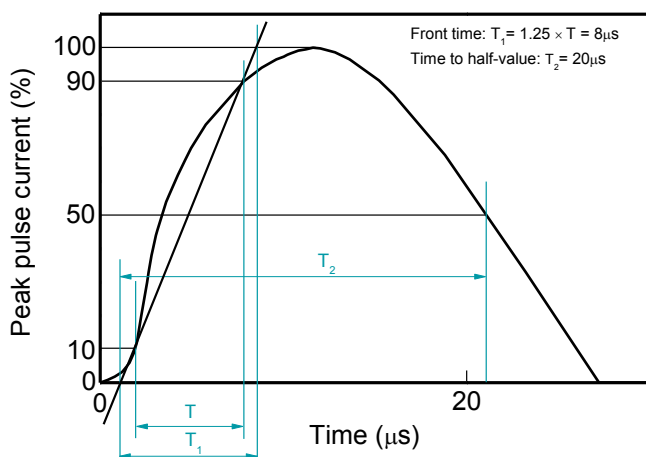
Power derating vs. Ambient temperature



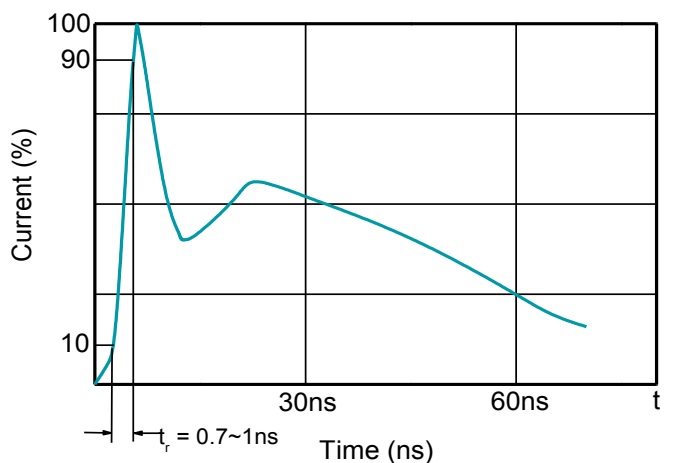
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage

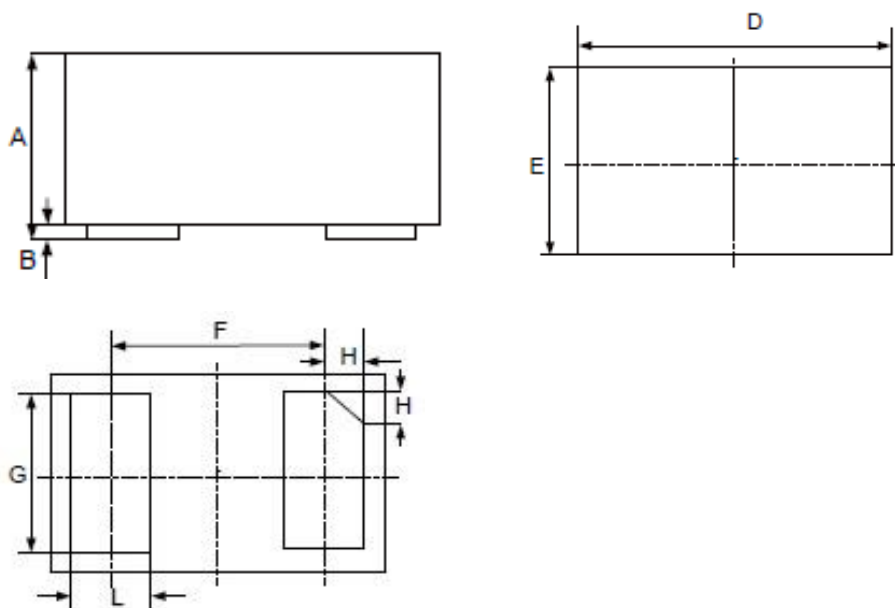


8/20 μ s waveform per IEC61000-4-5



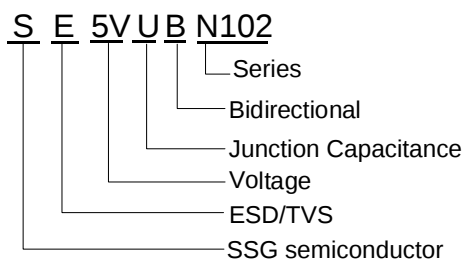
Contact discharge current waveform per IEC61000-4-2

Outline Drawing – DFN1006



DIM	MILIMETER	
	MIN (mm)	MAX (mm)
A	0.34	0.55
B	0	0.05
D	0.95	1.08
E	0.55	0.68
F	0.65(Typ)	
G	0.40	0.60
H	0.07	0.17
L	0.20	0.30

Part Numbering System



Device	Package	Shipping	MarKing	Parameter
SE5VUBN102	DFN1006-2L	10000/Tape&Reel	5 *	5 = Product Code T = Device Code