



Features

- ◆ Working voltage: 5V
- ◆ DFN1006-2L Package
- ◆ Transient protection for data lines to IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- ◆ IEC 61000-4-5 (Surge) 8A (8/20 μs)
- ◆ Low leakage current
- ◆ Low clamping voltage
- ◆ Solid-state silicon-avalanche technology

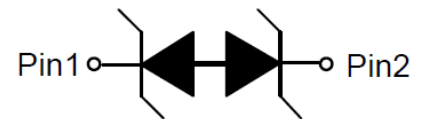
Applications

- ◆ Personal digital assistants (PDA s)
- ◆ Notebooks, Desktops, and Servers,
- ◆ Cell phone Handsets and Accessories
- ◆ Portable Electronics
- ◆ Peripherals

DFN1006-2L



PIN CONFIGURATION



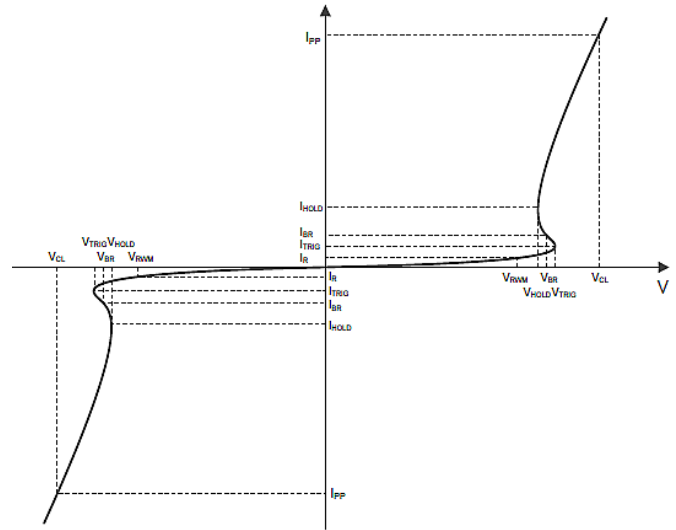
Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu\text{S}$)	P_{PK}	90	W
Peak Pulse Current ($t_p = 8/20\mu\text{S}$)	I_{pp}	8	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	kV
ESD according to IEC61000-4-2 contact discharge		± 30	kV
Lead Soldering Temperature	T_L	260 (10 sec)	$^{\circ}\text{C}$
Operating Temperature	T_{OP}	-55 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$



Definitions of electrical characteristics

Symbol	Parameter
V_{RWM}	Reverse Stand-off Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Reverse Breakdown Voltage @ I_T
I_{BR}	Reverse Breakdown Current
I_{PP}	Reverse Peak Pulse Current
V_{CL}	Clamping Voltage @ I_{PP}
V_{TRIG}	Reverse Trigger Voltage
I_{TRIG}	Reverse Trigger Current
V_{HOLD}	Reverse Holding Voltage
I_{HOLD}	Reverse Holding Current

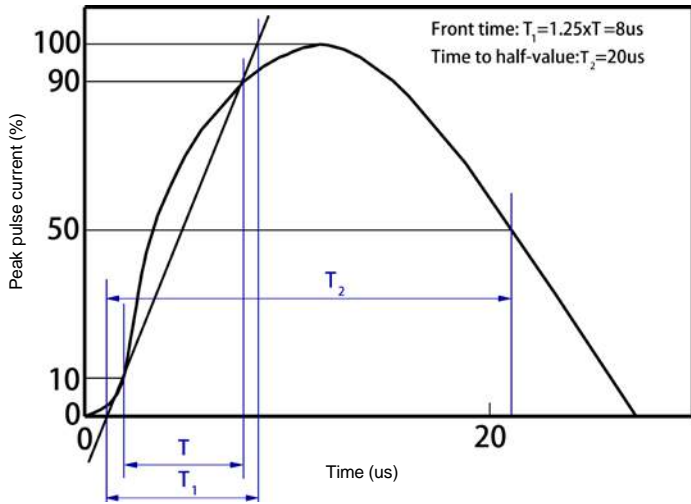


Electrical Characteristics (Ta=25°C, unless otherwise noted)

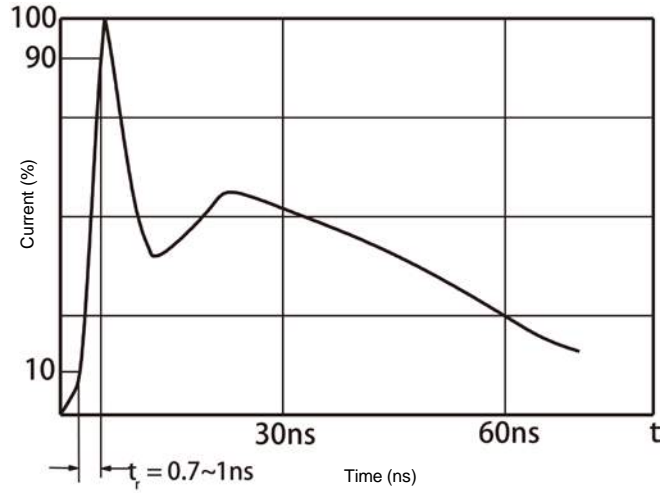
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				±5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			0.5	uA
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	5.5	5.8	6.5	V
Reverse Holding Voltage	V_{Hold}	$I_{Hold} = 50mA$	5.5	5.8	6.5	V
Clamping Voltage ¹⁾	V_{CL}	$I_{PP} = 5A$ $t_P = 8/20\mu s$			9.5	V
		$I_{PP} = 8A$ $t_P = 8/20\mu s$			12	V
Junction Capacitance	C_j	$V_R = 0V$ $f = 1MHz$		15	20	pF



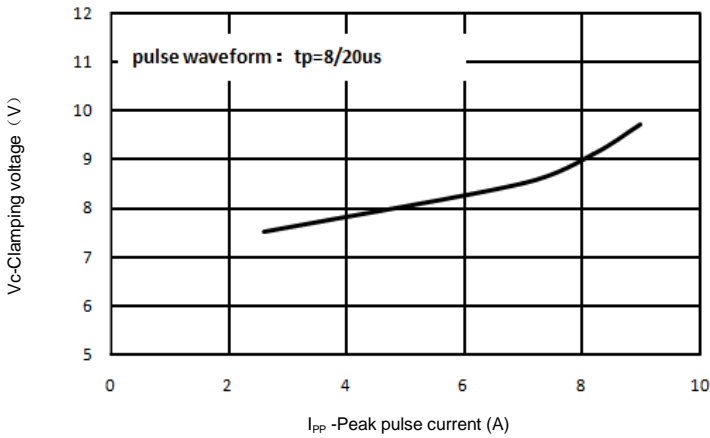
Typical Characteristics (Ta=25°C, unless otherwise noted)



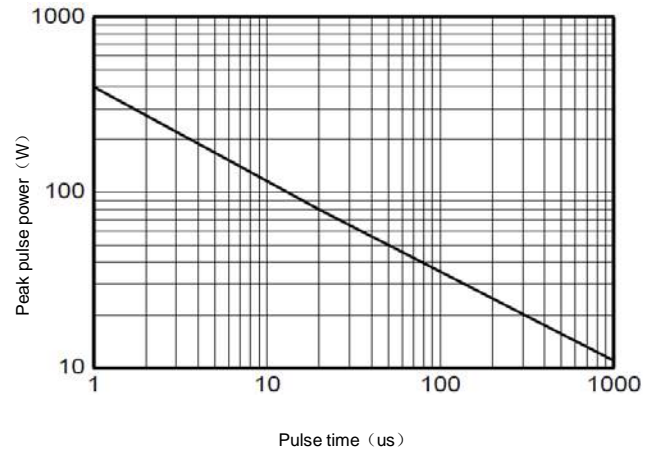
8/20 us waveform per IEC61000-4-5



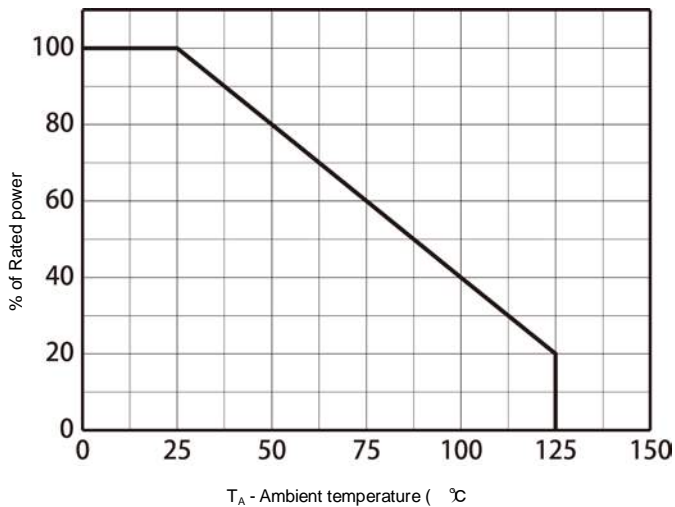
Contact discharge current waveform per IEC61000-4-2



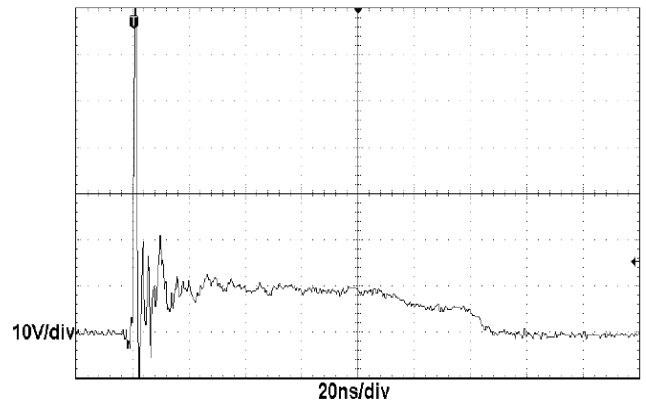
Clamping voltage vs. Peak pulse current



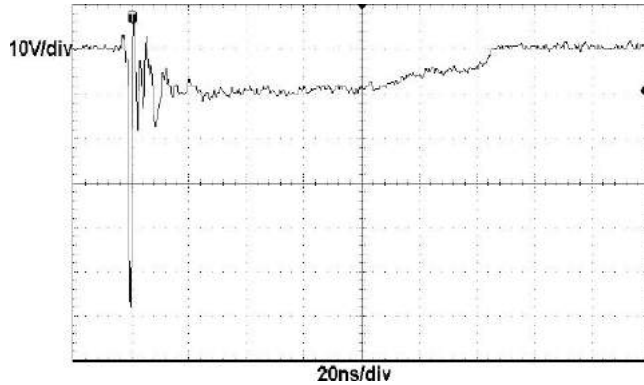
Non-repetitive peak pulse power vs. Pulse time



Power derating vs. Ambient temperature

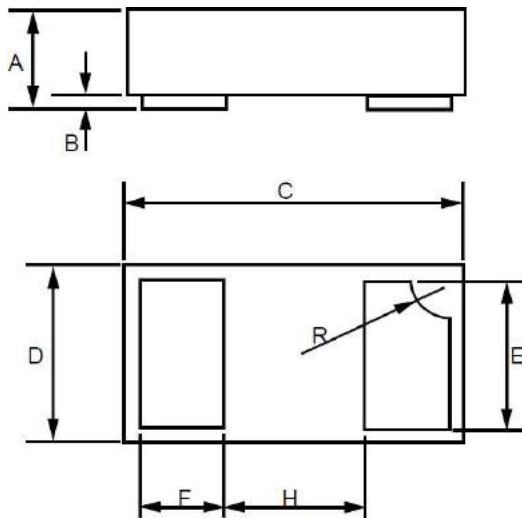


ESD Clamping(+8kV Contact Discharge)



ESD Clamping(-8kV Contact Discharge)

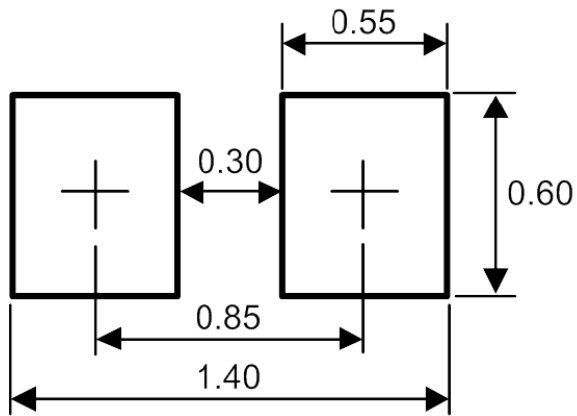
Package Outline Dimensions (DFN1006-2L)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.018	0.020	0.46	0.51
B	0.000	0.002	0	0.05
C	0.037	0.041	0.95	1.05
D	0.022	0.025	0.55	0.65
E	0.017	0.021	0.45	0.55
F	0.008	0.012	0.20	0.30
H	0.015Typ.		0.40Typ	
R	0.001	0.005	0.05	0.15



Recommend Land Pattern (Unit: mm)



Note:

This recommended land pattern is for reference purpose only.

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