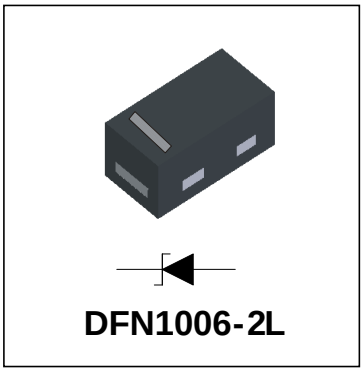
Features

- Protects one I/O or power line
- Working Voltage: 24V
- Low Leakage Current



DFN1006-2L

IEC COMPATIBILITY (EN61000-4)

- **IEC 61000-4-2 (ESD) ±30kV (air), ±30kV (contact)**
- **IEC 61000-4-4 (EFT) 40A (5/50ns)**
- **IEC 61000-4-5 (Lightning) 10A (8/20μs)**

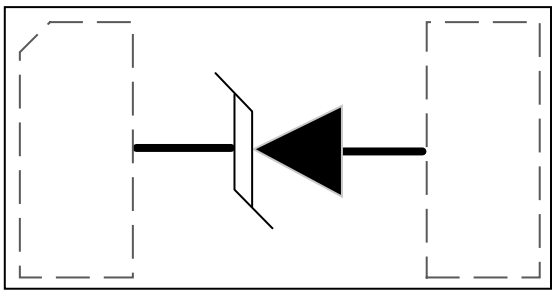
Mechanical Characteristics

- JEDEC DFN1006 package
- Molding compound flammability rating: UL 94V-0
- Packaging : Tape and Reel per EIA 481
- RoHS/WEEE Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 Players

Schematic & PIN Configuration

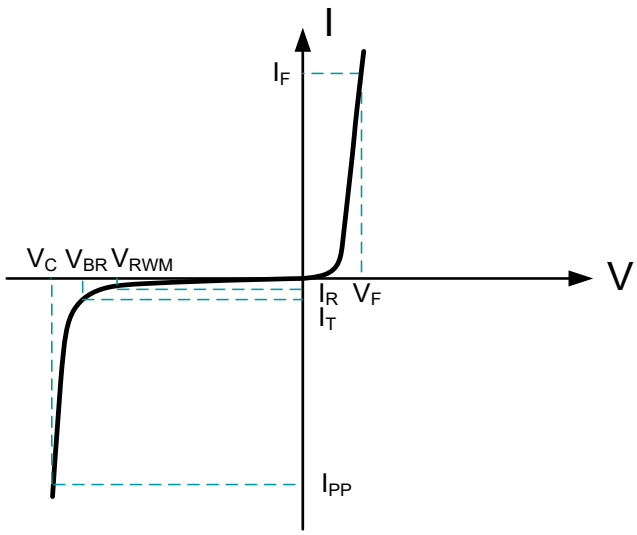


Absolute maximum ratings

Parameter	Symbol	Rating	Unit
Peak pulse power (t_p = 8/20μs)	P_{pk}	400	W
Peak pulse current (t_p = 8/20μs)	I_{PP}	10	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	
Operation junction temperature	T_J	125	°C
Lead temperature	T_L	260	°C
Storage temperature	T_{STG}	-55~150	°C

Electrical Parameters (T=25℃)

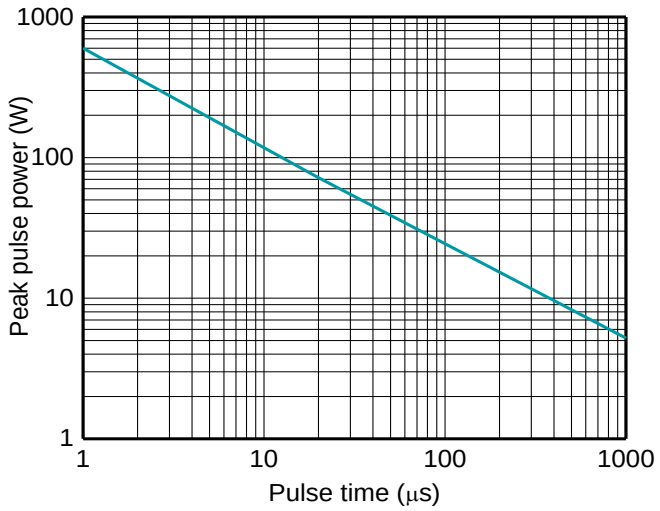
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_F	Forward Current
V_F	Forward Voltage @ I_F



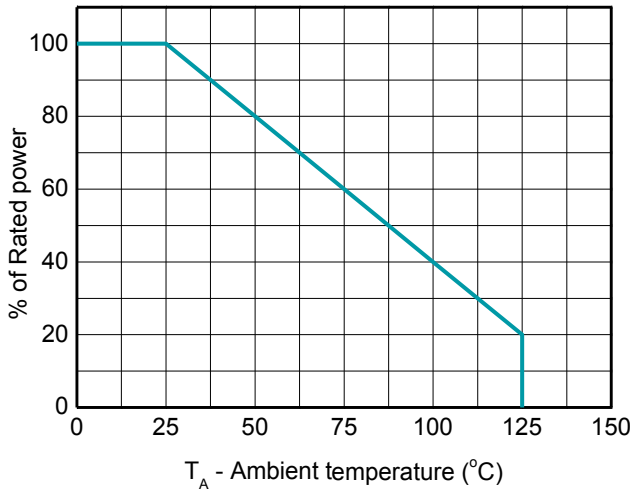
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				24	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	26.5		30	V
Reverse Leakage Current	I_R	V_{RWM}=24V,T=25℃			0.1	μA
Peak Pulse Current	I_{PP}	tp =8/20μs		10		A
Clamping Voltage	V_C	I_{PP}=10A,t_p=8/20μs		40		V
Junction Capacitance	C_j	V_R = 0V, f = 1MHz		30	60	pF

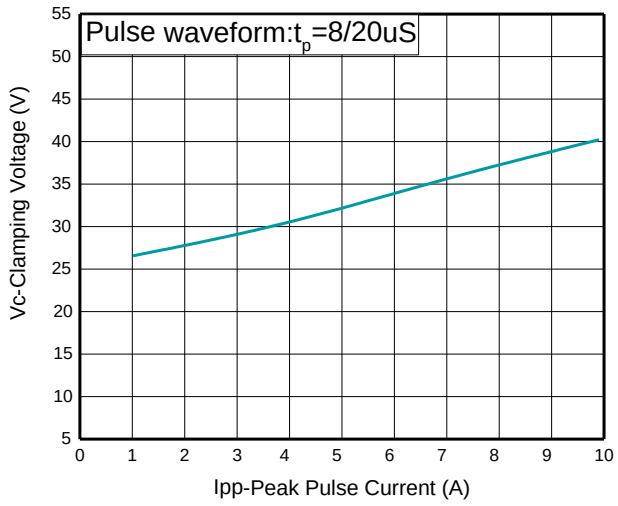
Typical Characteristics



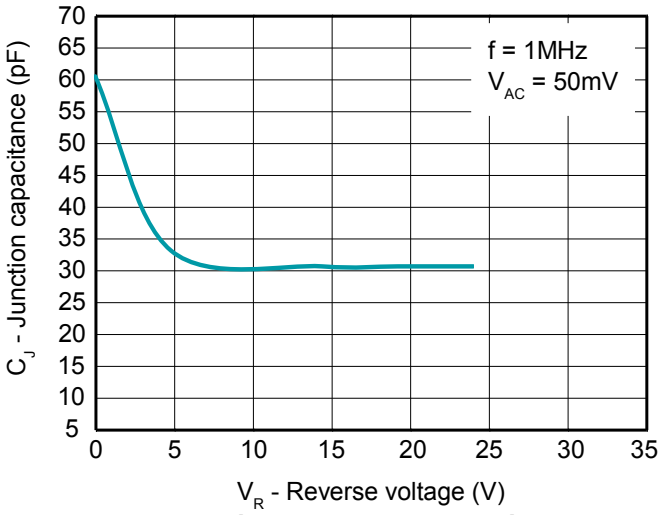
Non-repetitive peak pulse power vs. Pulse time



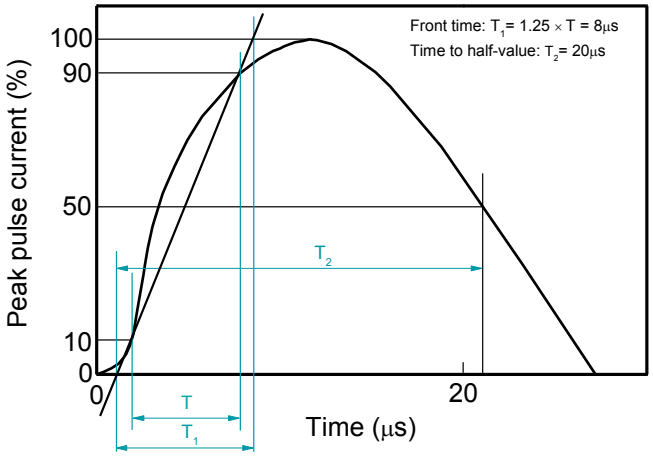
Power derating vs. Ambient temperature



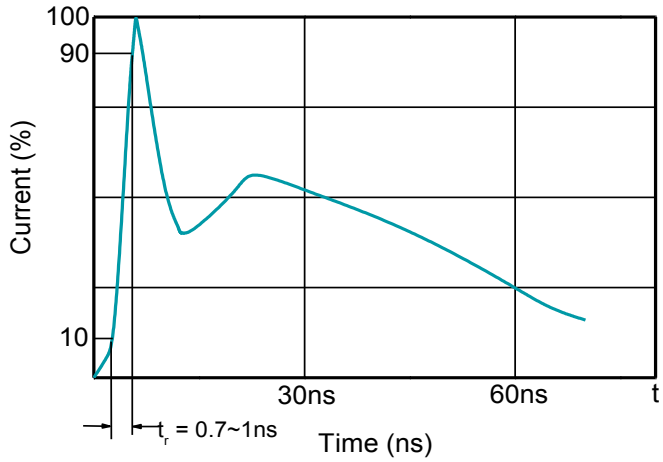
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage

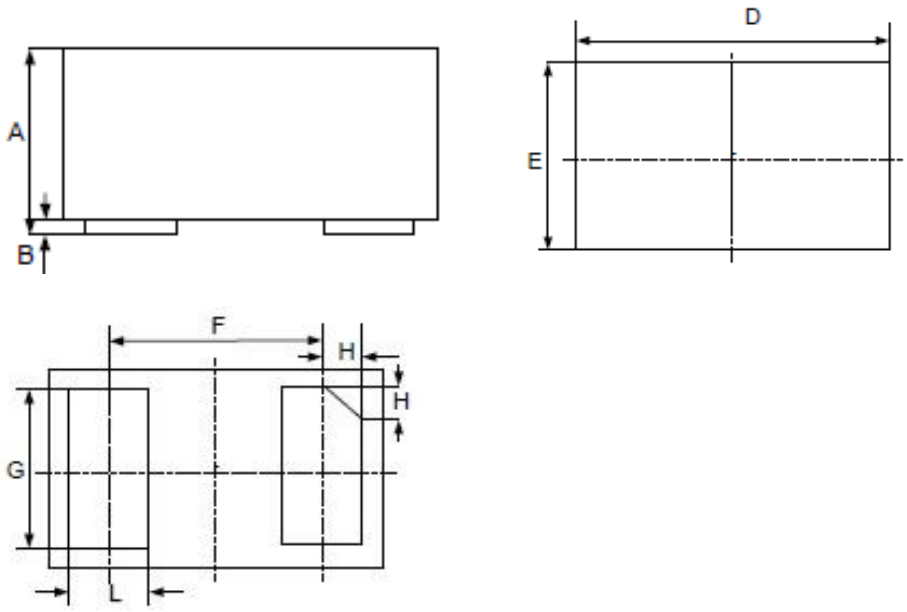


8/20μs waveform per IEC61000-4-5



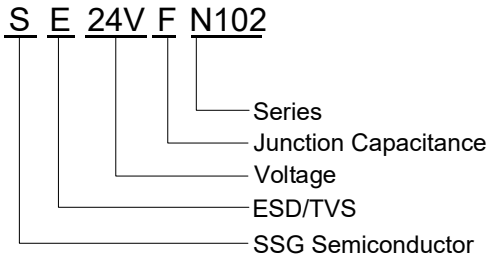
Contact discharge current waveform per IEC61000-4-2

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
SE24VFN102	DFN1006-2L	10000/Tape&Reel	**24***	24 = Product Code F = Device Code