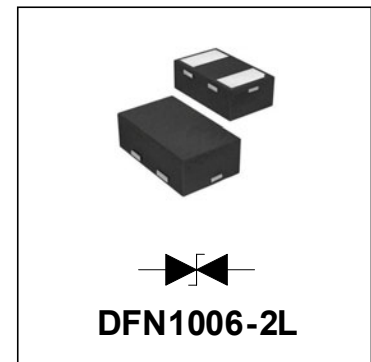


Features

- Small Body Outline Dimensions:
- Protects one I/O line
- Working Voltage: 12 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)

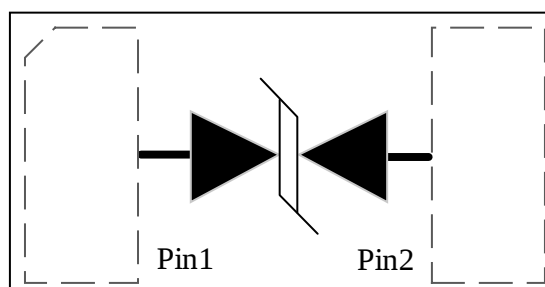
Mechanical Characteristics

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

Applications

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

Schematic & PIN Configuration

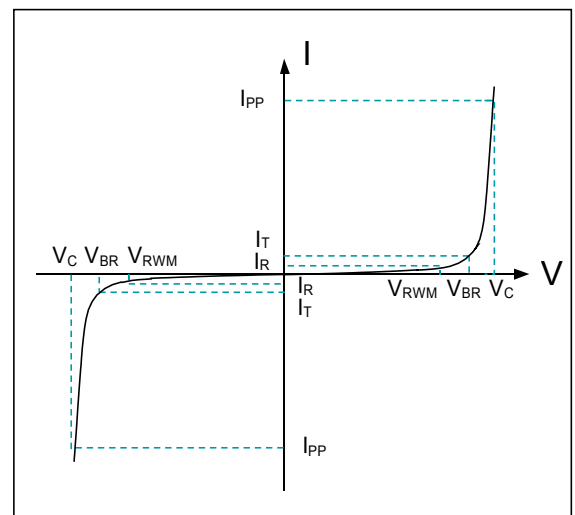


Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	90	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	4.5	A
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

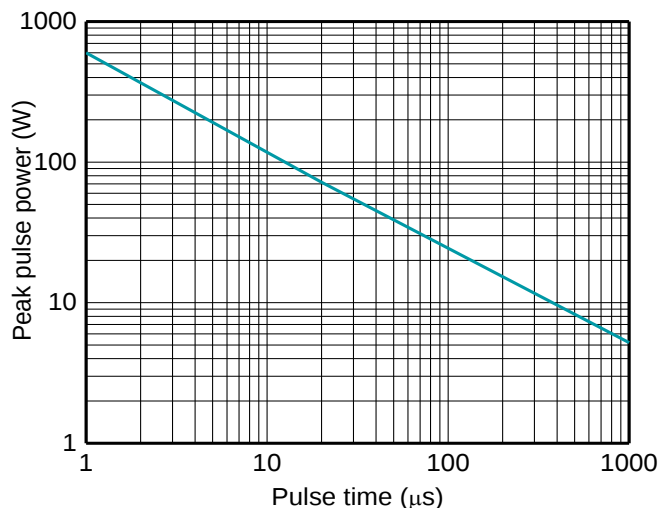


Note: 8/20 μs pulse waveform.

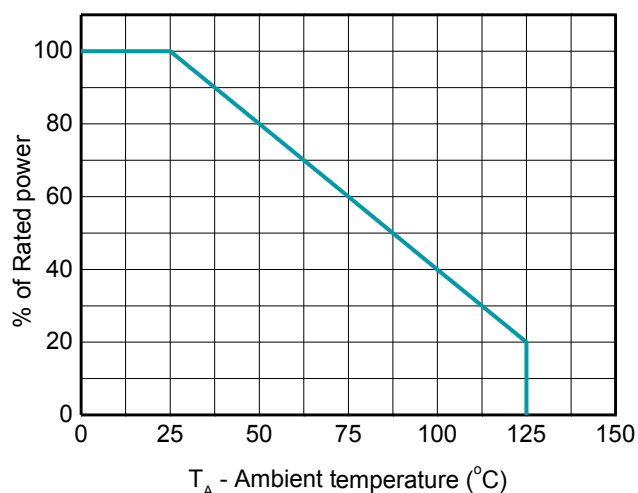
Electrical Characteristics

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	12	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	-	14	-	V
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$	-		4.5	A
Clamping Voltage	V_C	$I_{PP} = 4.5A, t_p = 8/20\mu s$	-	19.5	-	V
Reverse Leakage Current	I_R	$V_{RWM} = 12V, T = 25^\circ C$	-	-	0.1	μA
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$	-	8	-	pF

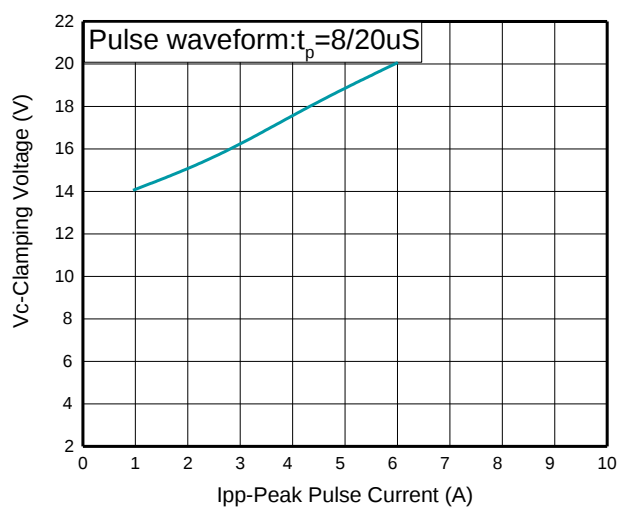
Typical Characteristics



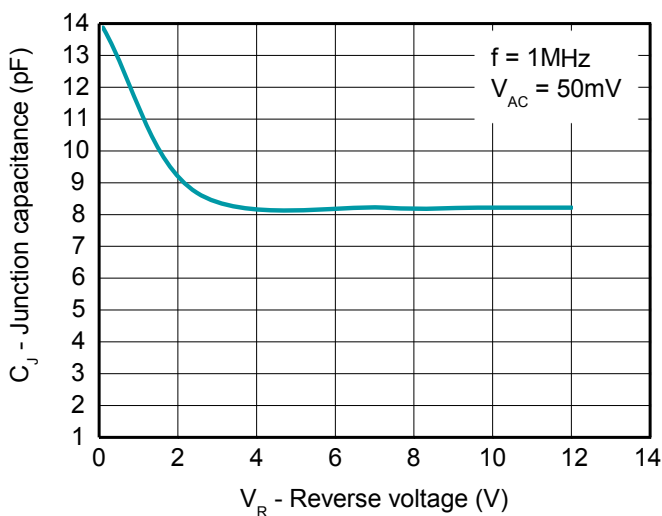
Non-repetitive peak pulse power vs. Pulse time



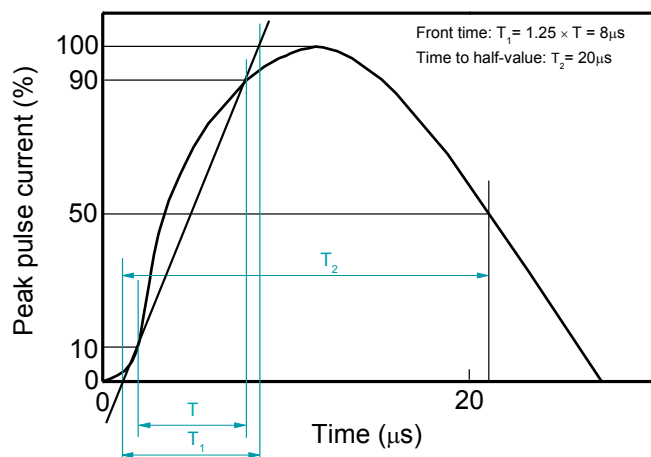
Power derating vs. Ambient temperature



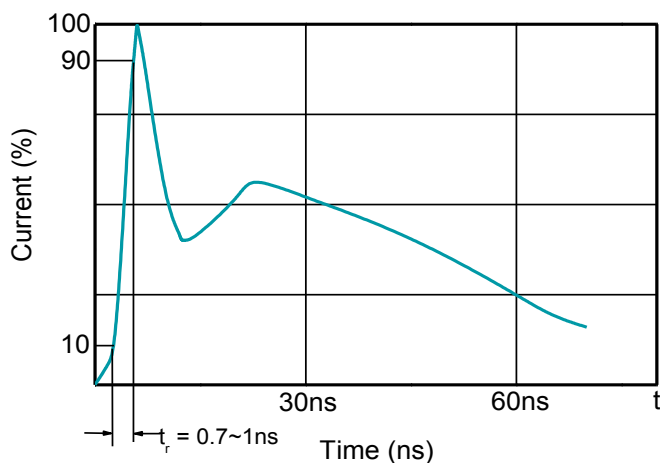
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage

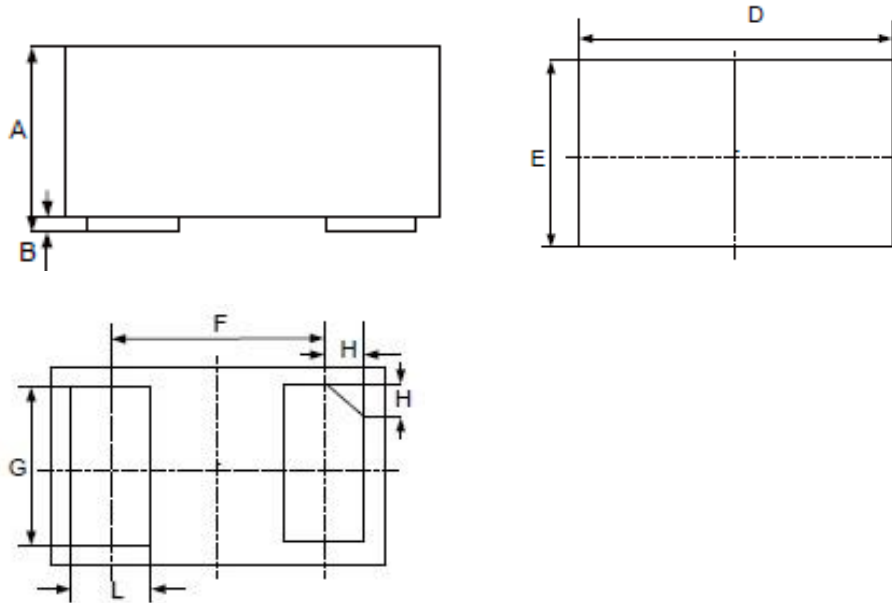


8/20μs waveform per IEC61000-4-5



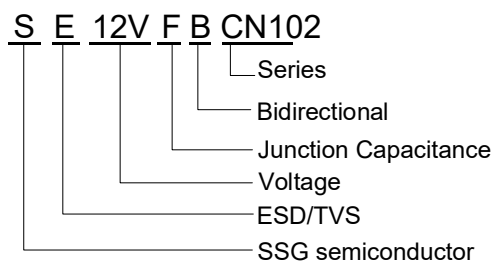
Contact discharge current waveform per IEC61000-4-2

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
SE12VFBN102	DFN1006-2L	10000/Tape&Reel	A *	A = Product Code F = Device Code