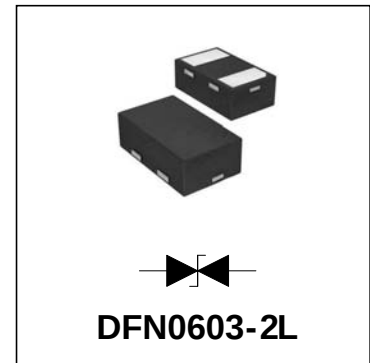


Features

- Small Body Outline Dimensions: 0.60 mm x 0.30 mm
- Bidirectional ESD Protection of one line
- Low Clamping Voltage
- Working Voltage: 12 V
- Low Leakage Current

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20 μs)



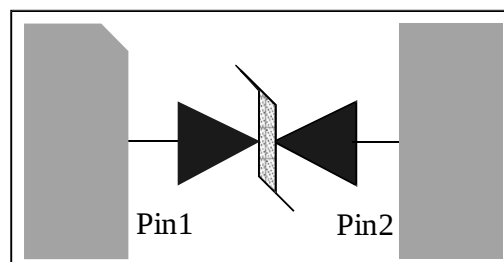
Mechanical Characteristics

- DFN0603-2L package
- Molding compound flammability rating: UL 94V-0
- Marking: Marking Code
- Packaging: Tape and Reel per EIA 481
- RoHS Compliant

Applications

- Cellular handsets and accessories
- Portable electronics
- Communication systems
- Computers and peripherals

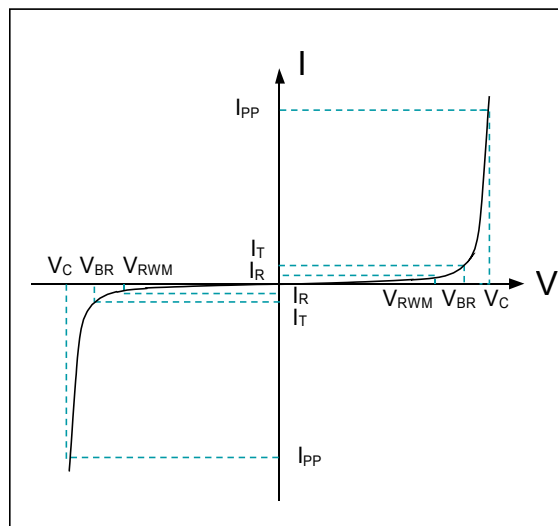
Schematic & PIN Configuration



Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	100	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	4	A
Operating Temperature	T_J	-55 to +150	°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

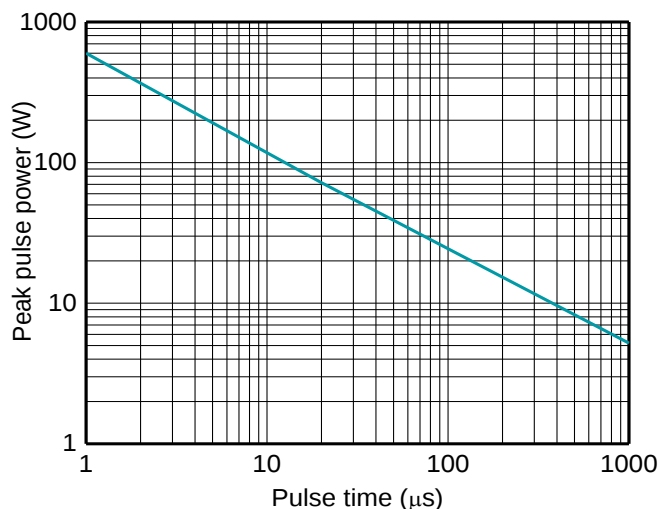


Note: 8/20μs pulse waveform.

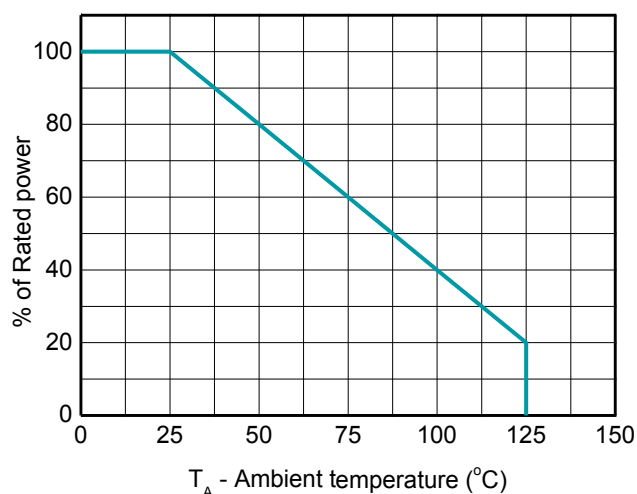
Electrical Characteristics

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				12.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	13.4			V
Reverse Leakage Current	I_R	$V_{RWM} = 12V$, $T = 25^\circ C$			200	nA
Clamping Voltage	V_C	$I_{PP} = 4A$, $t_p = 8/20\mu s$		20	25	V
Dynamic Resistance ^{1,2}	R_{DYN}	$TLP = 0.2/100ns$		0.65		Ω
ESD Clamping Voltage ¹	V_C	$I_{PP} = 4A$, $t_p = 0.2/100ns$ (TLP)		18.2		V
ESD Clamping Voltage ¹	V_C	$I_{PP} = 16A$, $t_p = 0.2/100ns$ (TLP)		26.5		V
Junction Capacitance	C_j	$V_R = 0V$, $f = 1MHz$		10	15	pF

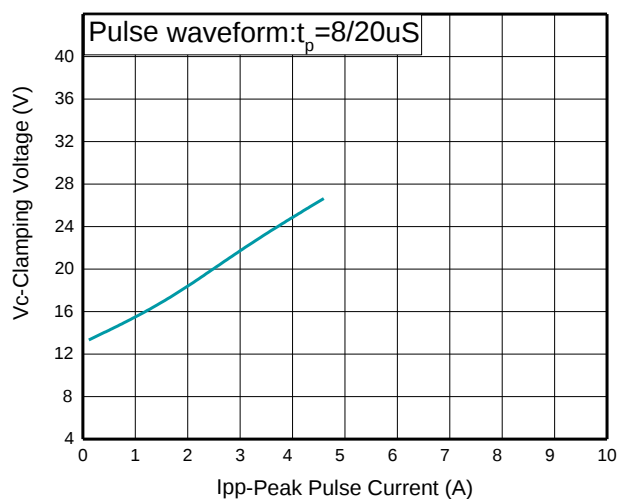
Typical Characteristics



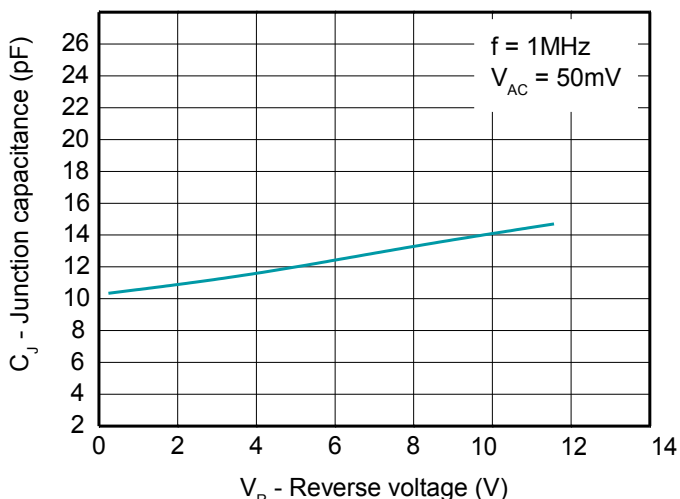
Non-repetitive peak pulse power vs. Pulse time



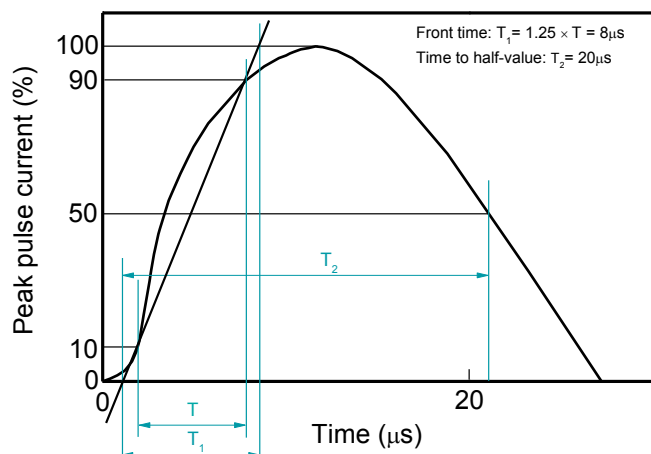
Power derating vs. Ambient temperature



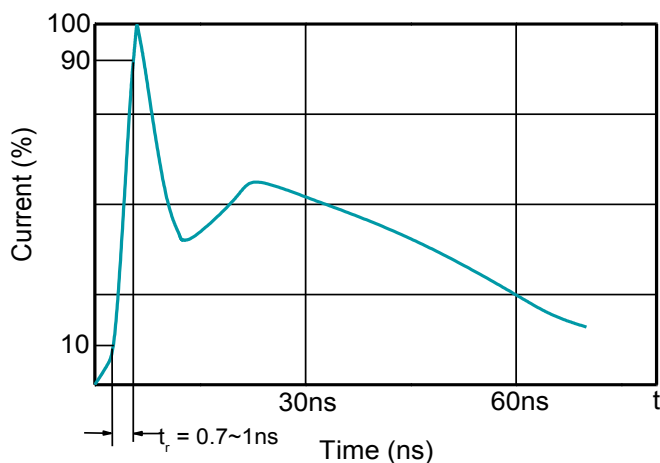
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage



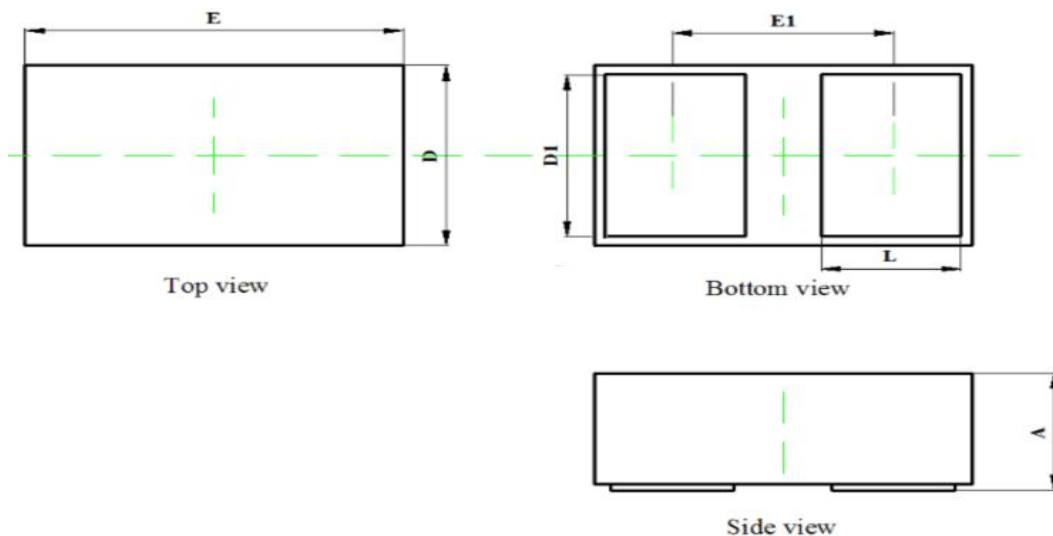
8/20μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

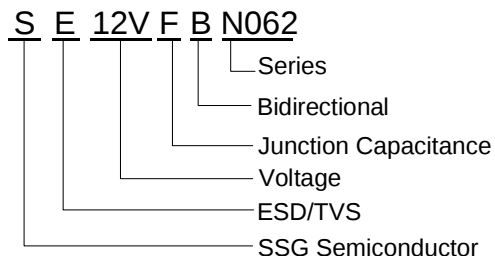
Package Outline Dimensions

DFN0603 Package Outline



Symbol	Dimensions In Millimeters		
	Min	Typical	Max
A	0.26	0.32	0.35
D	0.25	0.30	0.35
E	0.55	0.60	0.65
D1	0.20	0.25	0.30
E1		0.35	
L	0.13	0.18	0.23

Part Numbering System



Device	Package	Shipping	MarKing	Parameter
SE12VFBN062	DFN0603-2L	10000/Tape&Reel	A *	A = Product Code 12 = Device Code