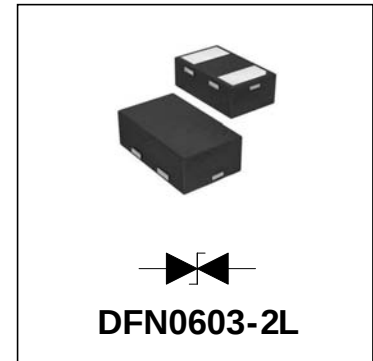


Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny DFN0603 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j = 0.3 \text{ pF typ.}$)
- Protection one data/power line
- IEC 61000-4-2 $\pm 20\text{kV}$ contact $\pm 20\text{kV}$ air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 4A(8/20 μs)



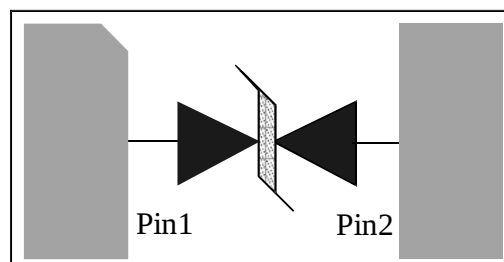
Applications

- Serial ATA
- PCI Express
- Desktops, Servers and Notebooks
- MDDI Ports
- USB Ports
- Display Ports
- HDMI Ports
- Digital Visual Interfaces (DVI)

Mechanical Data

- DFN0603package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration

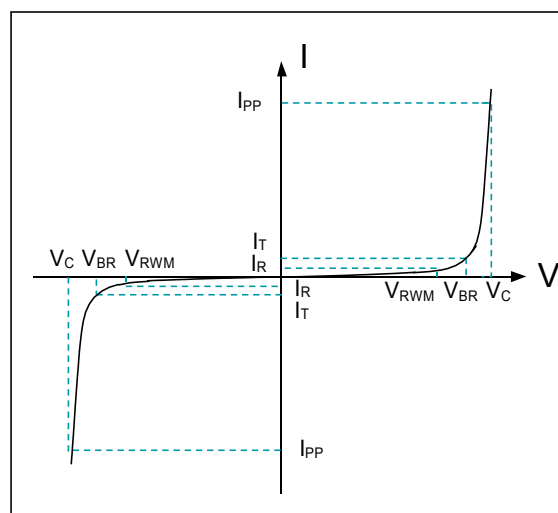


Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	70	Watts
Peak Pulse Current ($t_p=8/20\mu s$)(note1)	I_{pp}	4.0	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	20 20	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to +125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to +125	$^{\circ}C$

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

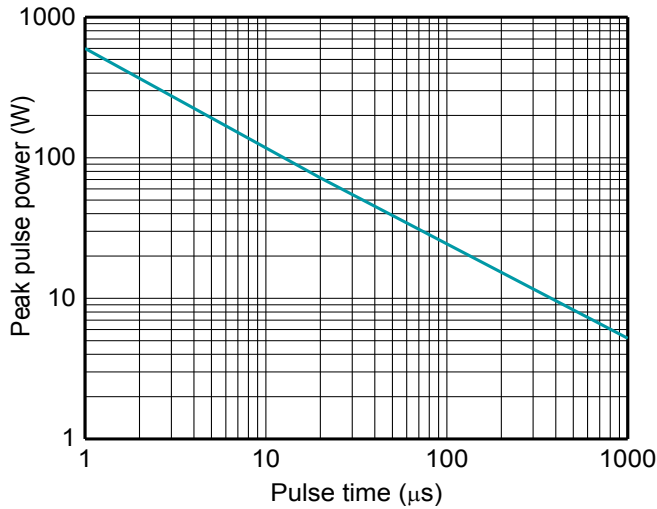


Note: .8/20μs pulse waveform.

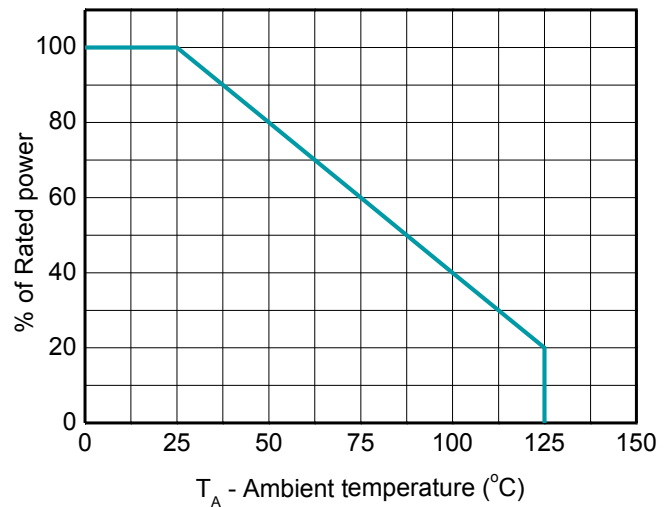
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.5		8.5	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^{\circ}C$			0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$			4.0	A
Clamping Voltage	V_C	$I_{PP}=4.0A, t_p=8/20\mu s$		18		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		0.3	0.35	pF

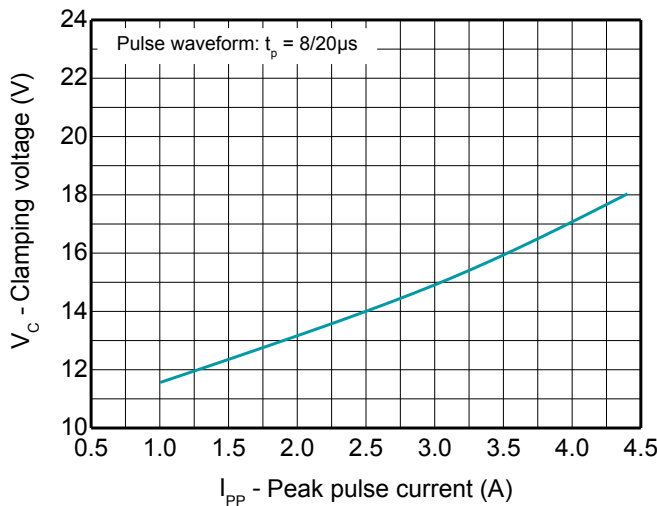
Typical Characteristics



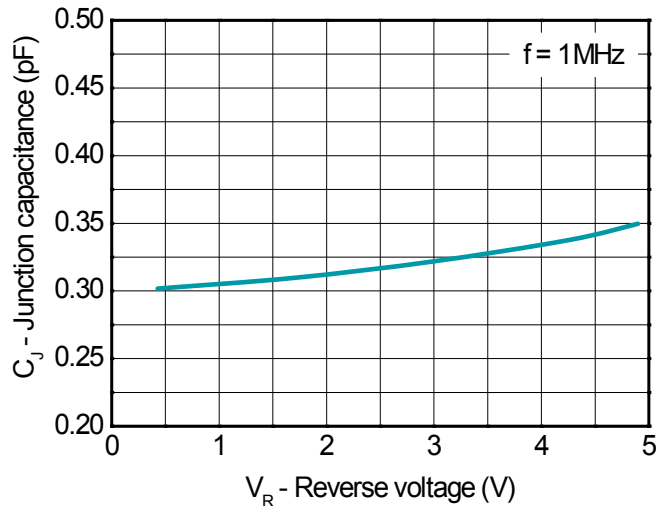
Non-repetitive peak pulse power vs. Pulse time



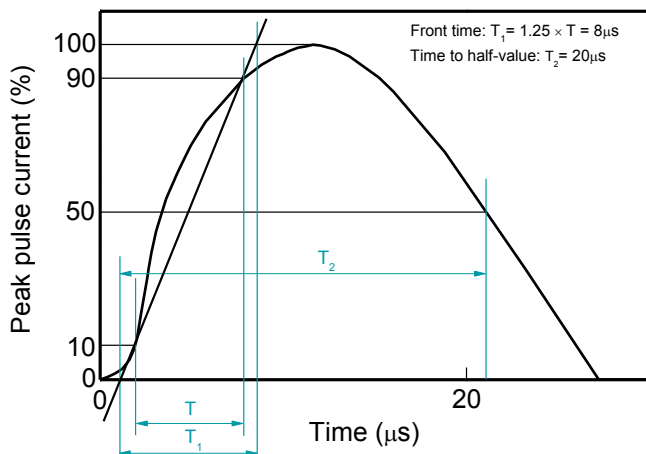
Power derating vs. Ambient temperature



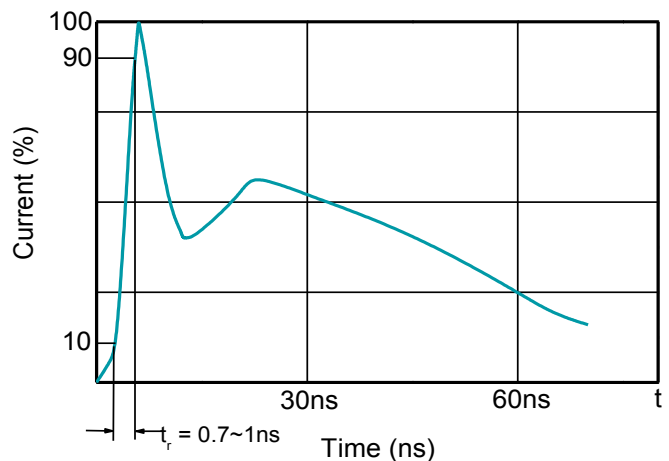
Clamping voltage vs. Peak pulse current



Capacitance vs. Reverse voltage



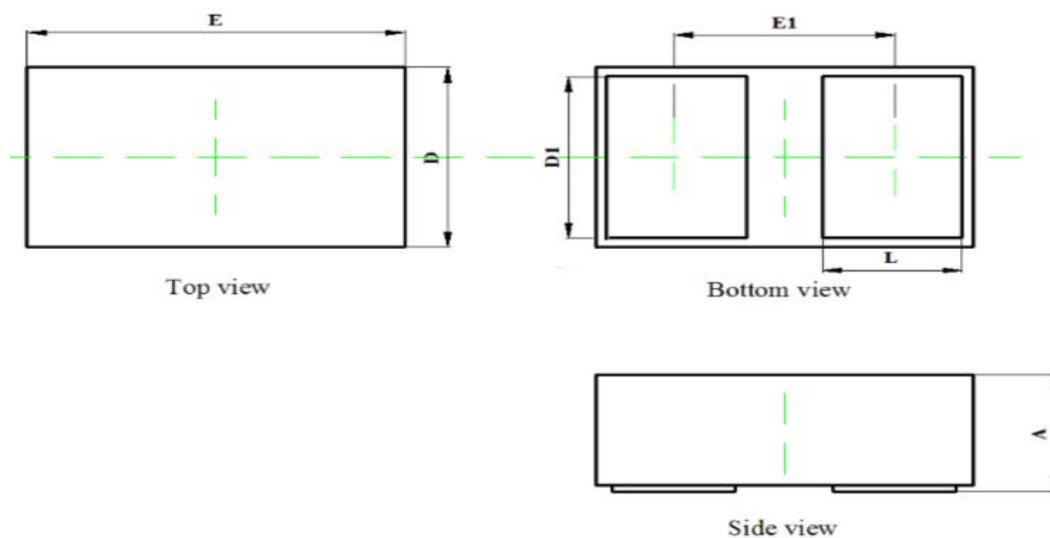
8/20 μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2

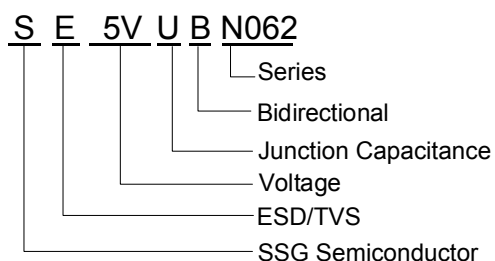
Package Outline Dimensions

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
SE5VUBN062	DFN0603-2L	15000/Tape&Reel	Q *	Q = Product Code M = Device Code