

**90W Surface Mount TVS For ESD Protection****FEATURES**

- Ultra small package: 0.6 x0.3 x0.3mm
- Protects one data or power line
- Ultra low leakage : nA level
- Operating voltage : 24V
- Low clamping voltage

APPLICATIONS

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players

MECHANICAL DATA

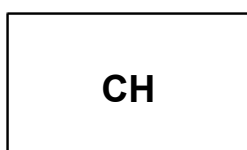
- Case : Molded, plastic DFN0603-2L
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame retardant

IEC COMPATIBILITY

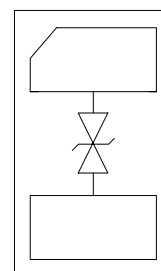
- IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 20\text{kV}$ (contact)
- IEC 61000-4-5 (Lightning) 2A (8/20 μs)

DFN0603-2L PACKAGE

Marking :



CH = Device Marking Code

SCHEMATIC & PIN CONFIGURATION



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

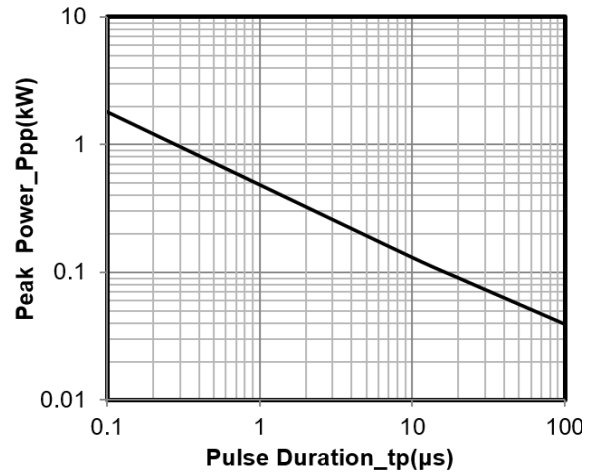
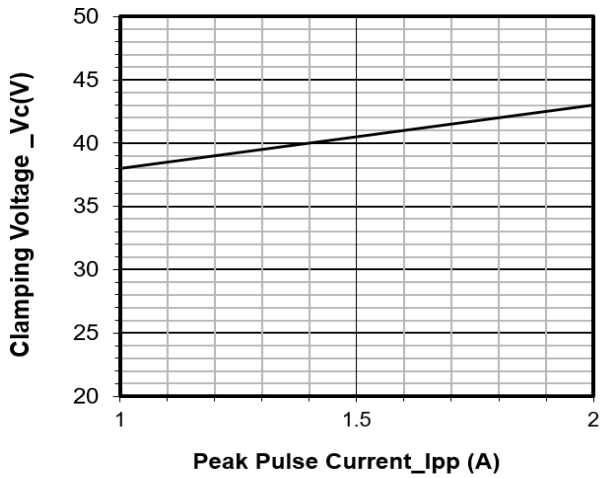
Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 μs)	Ppk	90	W
Peak Pulse Current(8/20 μs)	Ipp	2	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	± 25 ± 20	kV
Operating Temperature Range	TJ	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

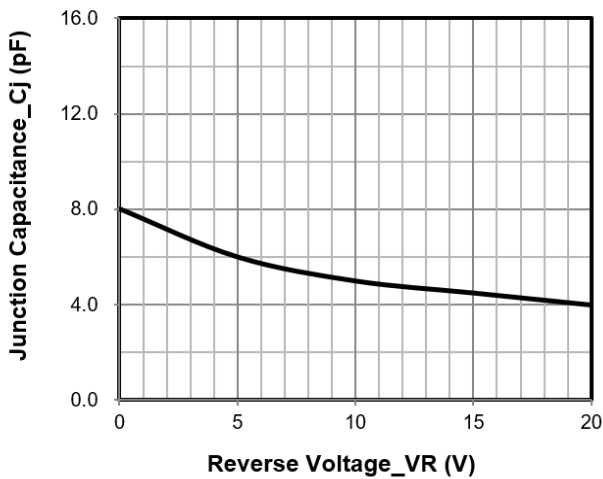
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			24	V	
Breakdown Voltage	VBR	26.8			V	IT = 1mA
Reverse Leakage Current	IR			0.2	μA	VT=VRWM
Clamping Voltage	VC			38	V	Ipp = 1A (8 x 20 μs pulse)
Clamping Voltage	VC			45	V	Ipp = 2A (8 x 20 μs pulse)
Junction Capacitance	CJ		8		pF	VR = 0V, f = 1MHz



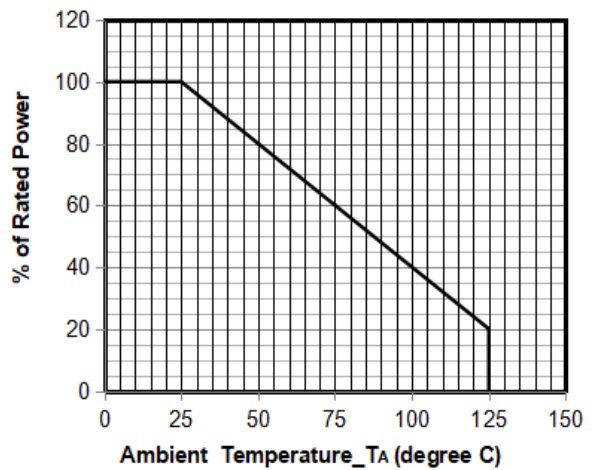
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



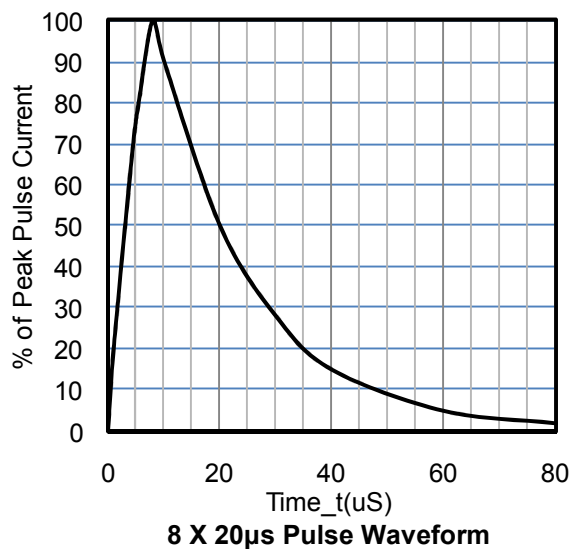
Junction Capacitance vs. Reverse Voltage



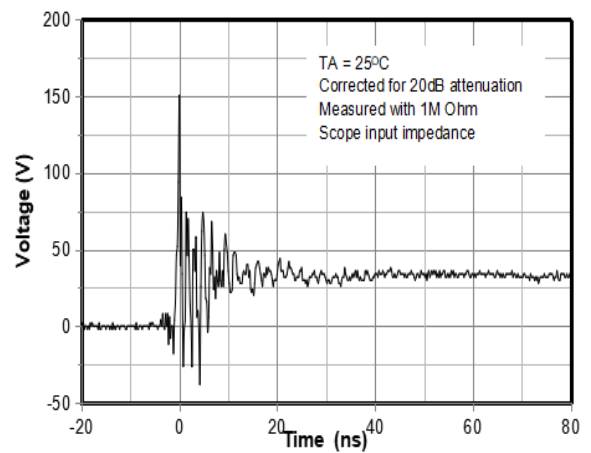
Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



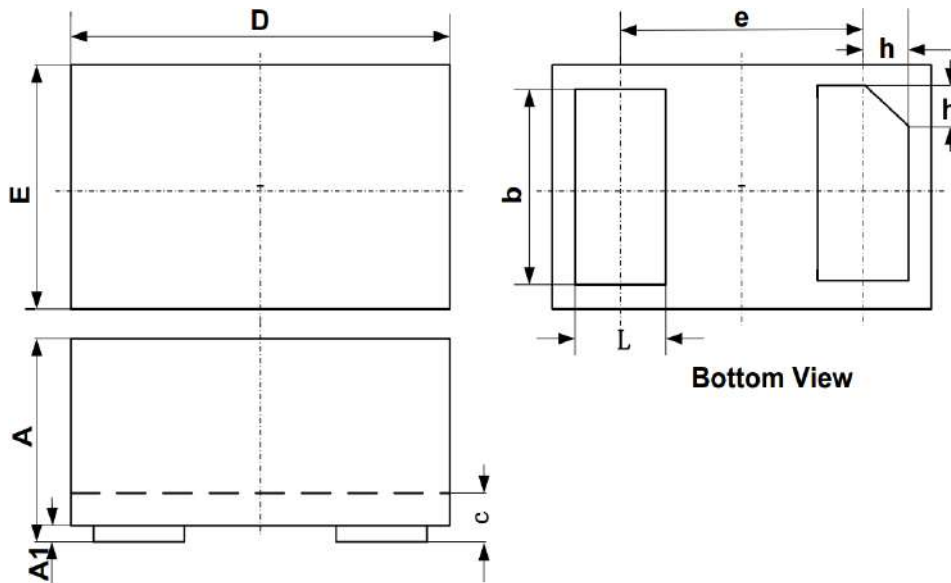
ESD Clamping Voltage

8 kV Contact per IEC61000-4-2



Outline Drawing

DFN0603-2L



SYM	MIN	NOM	MAX
A	0.230		0.330
A1	0.000	0.020	0.050
b	0.215	0.245	0.275
c	0.120	0.150	0.180
D	0.550	0.600	0.650
e	0.355 BSC		
E	0.250	0.300	0.350
L	0.160	0.190	0.220
h	0.079 BSC		

Dimensions in inches and (millimeters)

Rev.A

**Ordering Information:**

Device PN	Packing
SESD24DN -T ⁽¹⁾ H ⁽²⁾ - WS ⁽³⁾	Tape&Reel: 10 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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