

75W Surface Mount TVS For ESD Protection**FEATURES**

- Ultra low capacitance: 0.6pF typical
- Ultra low leakage : nA level
- Operating voltage : 3.3V
- Low clamping voltage
- 2-pin leadless package

APPLICATIONS

- Cellular Handsets and Accessories
- Display Ports
- MDDI Ports
- USB Ports
- Digital Visual Interface(DVI)
- PCI Express and Serial SATA Ports

MECHANICAL DATA

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

IEC COMPATIBILITY

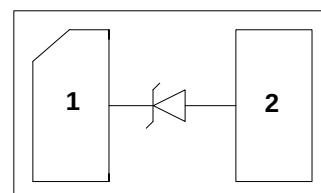
- IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (air),
 $\pm 20\text{kV}$ (contact)
- IEC 61000-4-5 (Lightning) 5A (8/20 μs)

DFN0603-2L PACKAGE

Marking :



30 = Device Marking Code
Bar denotes Cathode

SCHEMATIC & PIN CONFIGURATION

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

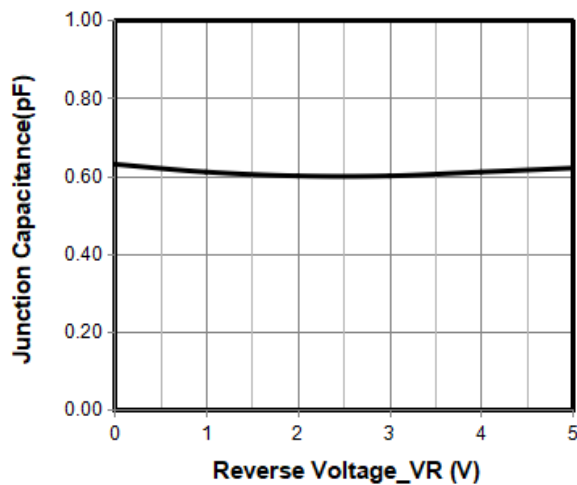
Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 μs)	Ppk	75	W
Peak Pulse Current(8/20 μs)	Ipp	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	± 25 ± 20	kV
Operating Temperature Range	TJ	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

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

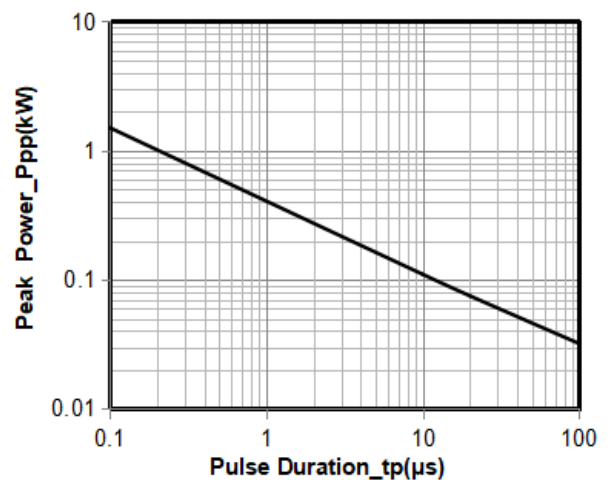
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			3.3	V	Pin 1 to Pin 2
Breakdown Voltage	VBR		6.2		V	IT = 1mA, Pin 1 to Pin 2
Reverse Leakage Current	IR			0.5	μA	VRWM = 3.3V, Pin 1 to Pin 2
Forward Voltage	VF		1.0	1.2	V	IF = 10mA, Pin 2 to Pin 1
Clamping Voltage	VC			10	V	Ipp = 1A (8 x 20 μs pulse), Pin 1 to Pin 2
Clamping Voltage	VC			15	V	Ipp = 5A (8 x 20 μs pulse), Pin 1 to Pin 2
Junction Capacitance	CJ		0.6	0.8	pF	VR = 0V, f = 1MHz



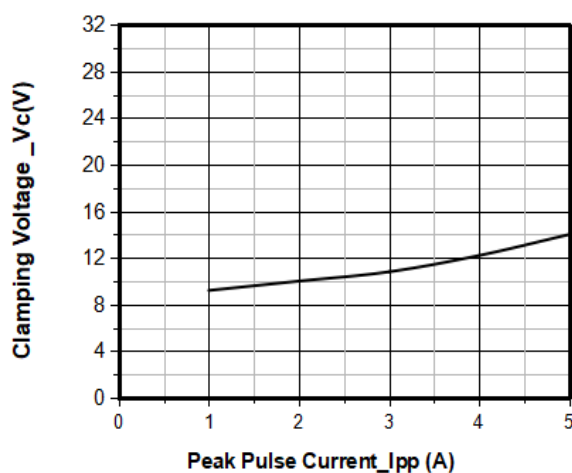
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



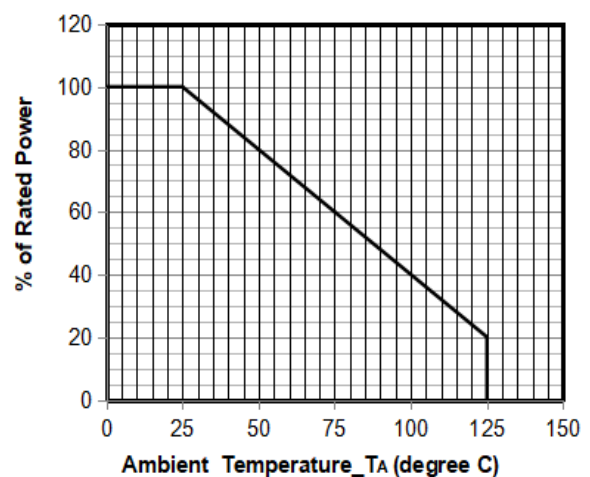
Junction Capacitance vs. Reverse Voltage



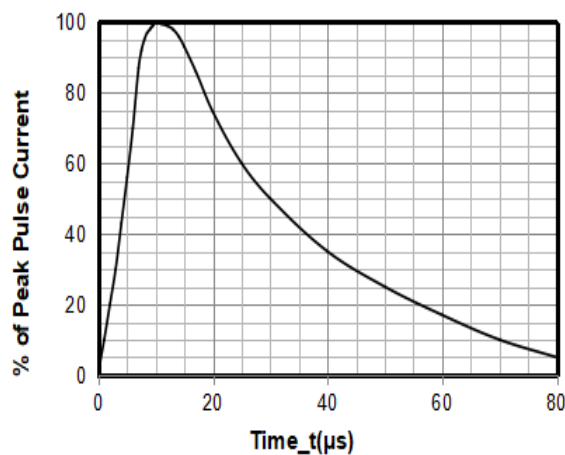
Peak Pulse Power vs. Pulse Time



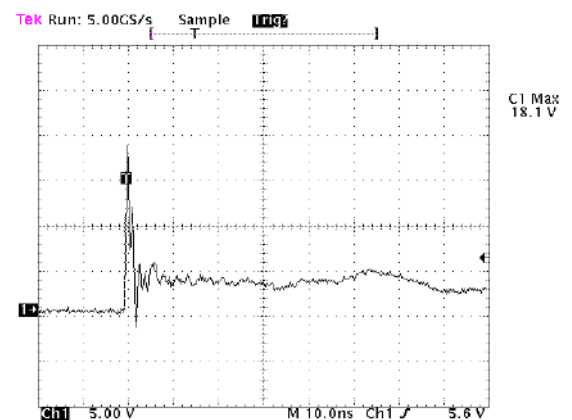
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20μs Pulse Waveform



Note: Data is taken with a 10x attenuator

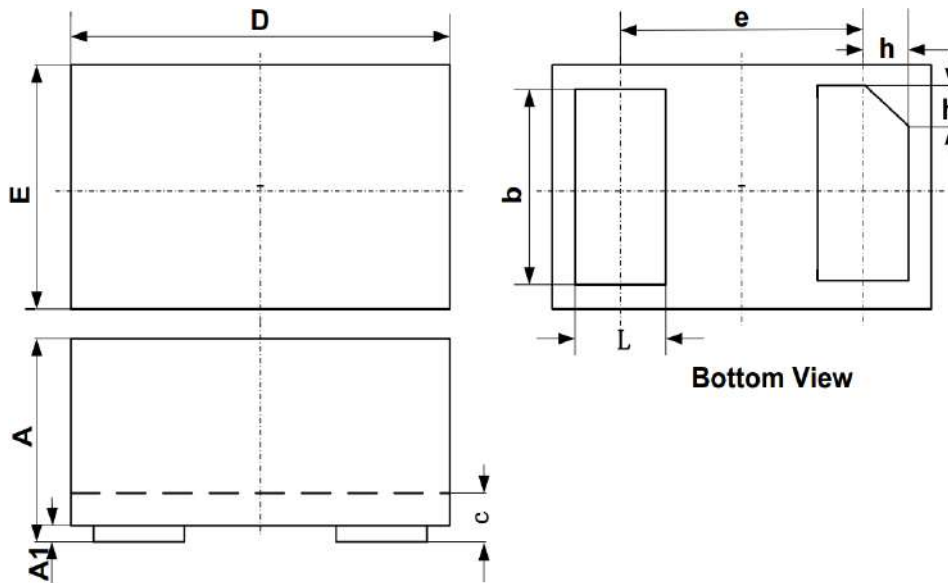
ESD Clamping Voltage

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
SESD3V3DN -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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