

80W Surface Mount TVS For ESD Protection**FEATURES**

- Very low capacitance
- Protects one data or power line
- Operating voltage : 5V
- Low clamping voltage
- 2-pin leadless package
- MSL 1

APPLICATIONS

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals
- Audio Players
- Keypads, Side Keys, USB 2.0, LCD Displays

MECHANICAL DATA

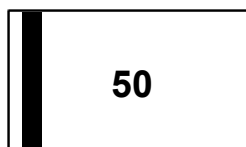
- Case : Molded, plastic
DFN0603-2L
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame retardant

IEC COMPATIBILITY

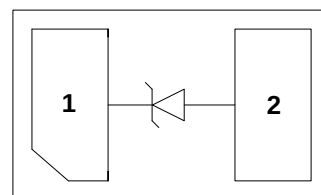
- IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air),
 $\pm 30\text{kV}$ (contact)
- IEC 61000-4-5 (Lightning) 8A (8/20 μs)

DFN1006-2L PACKAGE

Marking :



50 = Device Marking Code
Bar denotes Cathode

SCHEMATIC & PIN CONFIGURATION

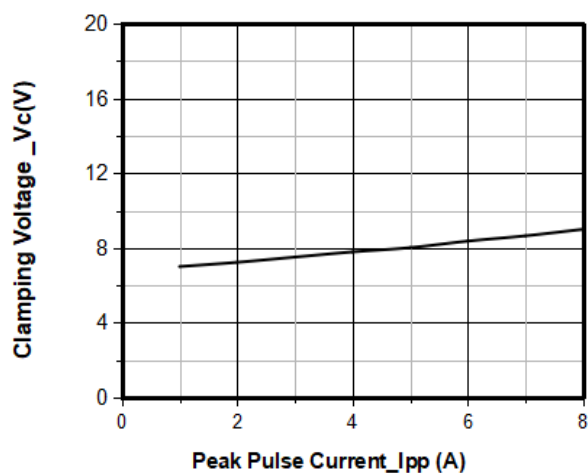
Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20 μs)	Ppk	80	W
Peak Pulse Current(8/20 μs)	Ipp	8	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	± 30 ± 30	kV
Operating Temperature Range	TJ	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

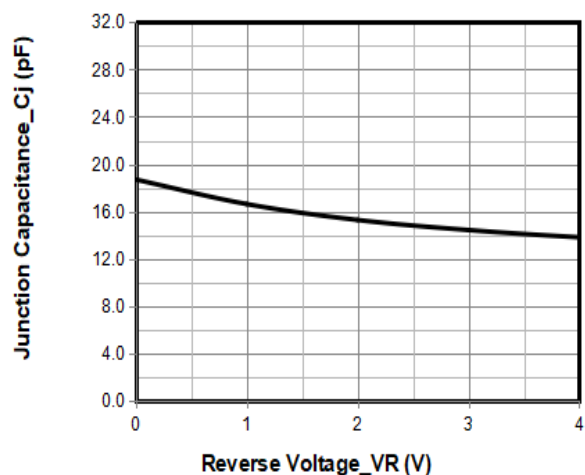
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	Pin 1 to Pin 2
Breakdown Voltage	VBR	6			V	IT = 1mA, Pin 1 to Pin 2
Reverse Leakage Current	IR			0.1	μA	VRWM = 5V, Pin 1 to Pin 2
Forward Voltage	VF		1.0	1.2	V	IF = 10mA, Pin 2 to Pin 1
Clamping Voltage	VC			8	V	I _{PP} = 1A (8 x 20 μs pulse), Pin 1 to Pin 2
Clamping Voltage	VC			10	V	I _{PP} = 8A (8 x 20 μs pulse), Pin 1 to Pin 2
Junction Capacitance	CJ			20	pF	VR = 0V, f = 1MHz

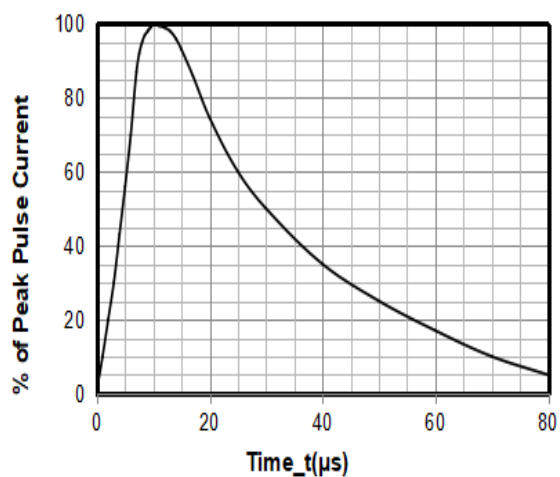
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



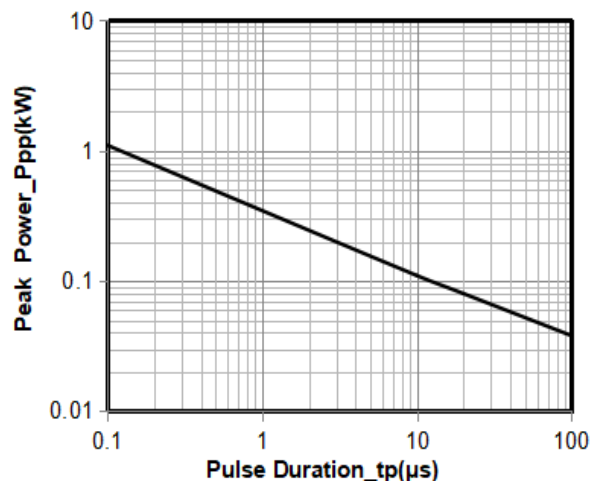
Junction Capacitance vs. Reverse Voltage



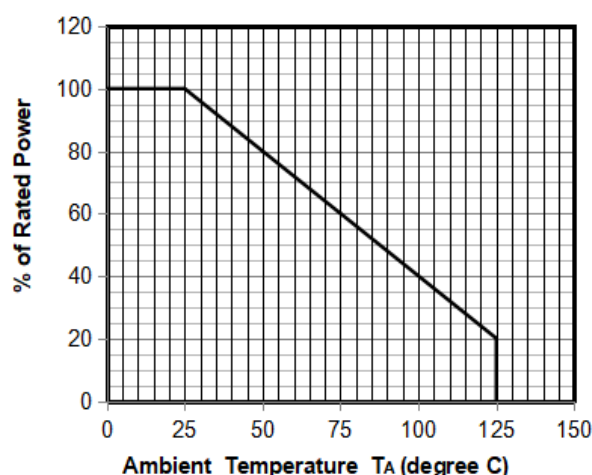
Clamping Voltage vs. Peak Pulse Current



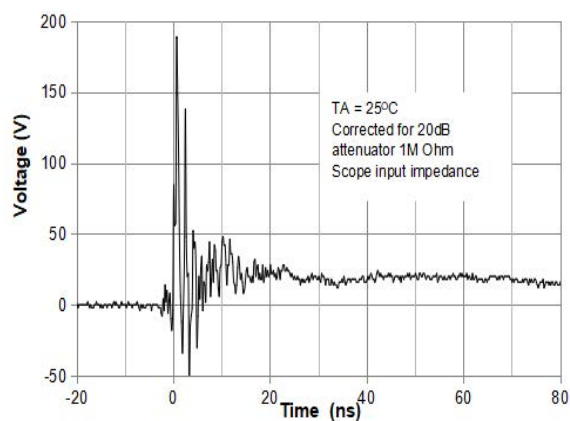
8 X 20 μ s Pulse Waveform



Peak Pulse Power vs. Pulse Time



Power Derating Curve

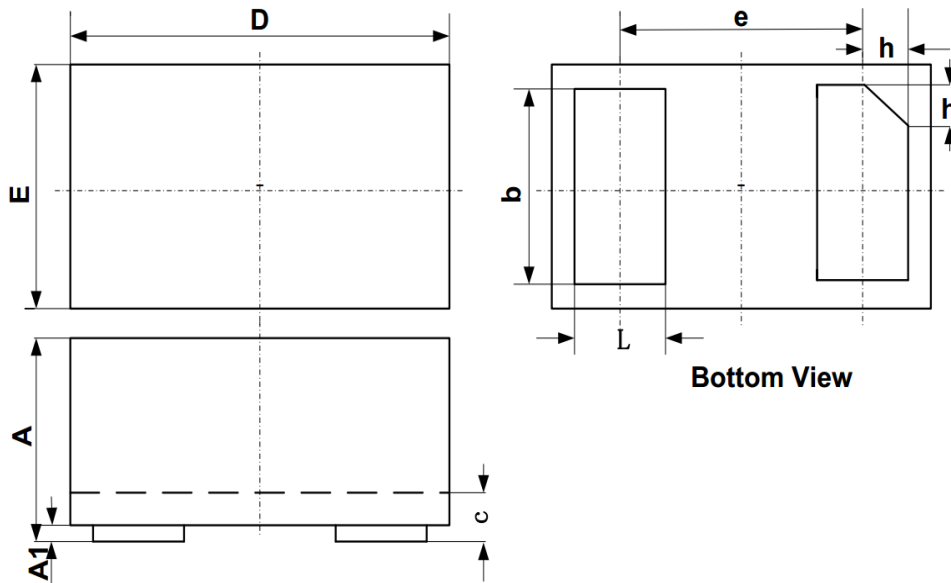


ESD Clamping Voltage

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
SESD05DN -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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