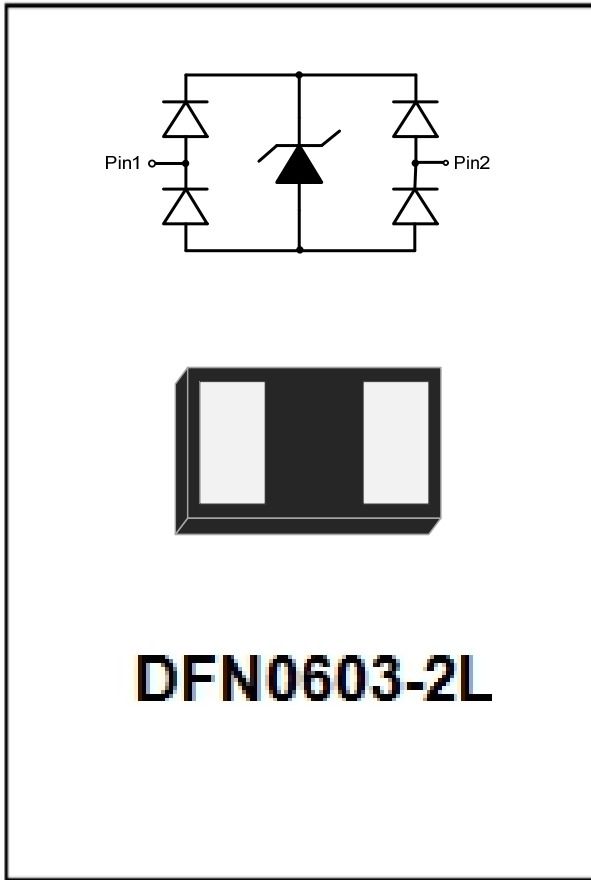


1-Line, Uni-directional, Transient Voltage Suppressor



Features

- Ultra small package
- Stand-off voltage: 5V Max
- Transient protection for each line according to
IEC61000-4-2(ESD): $\pm 20\text{kV}$ (Air)
IEC61000-4-2(ESD): $\pm 20\text{kV}$ (contact)
IEC61000-4-5(surge): 2.5A (8/20 μs)
- Ultra-low capacitance: $C_J = 0.3\text{pF}$ typ
- Low leakage current
- Low clamping voltage
- RoHS Compliant

Applications

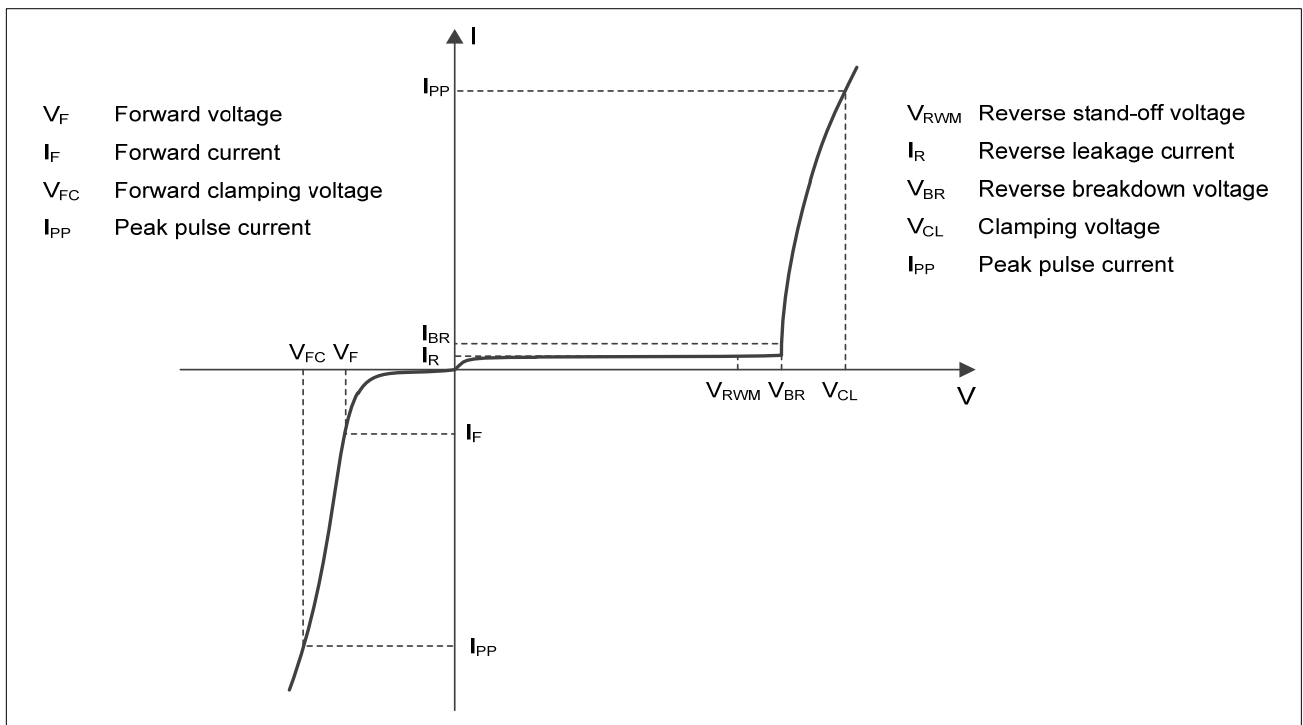
- Cellular Handsets and Accessories
- Display Ports
- MDDI Ports
- USB Ports
- Digital Visual Interface (DVI)
- PCI Express and Serial SATA Ports

Mechanical Characteristics

- Package: DFN0603-2L
- Case Material: "Green" Molding Compound.
- Marking Information: See Below



■Definitions of electrical characteristics





ESDSL5V0LZS

■Absolute Maximum Ratings (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	Rating	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	27.5	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	2.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	±20	kV
ESD according to IEC61000-4-2 contact discharge		±20	kV
Junction temperature	T_J	-55~125	°C
Storage temperature	T_{STG}	-55~150	°C

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				5
Reverse leakage current	I_R	uA	$V_{RWM} = 5V$			0.5
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	6		
Clamping voltage 1)	V_{CL}	V	$I_{PP} = 1A, t_p = 8/20\mu s$			9
		V	$I_{PP} = 2.5A, t_p = 8/20\mu s$			11
Junction capacitance	C_J	pF	$V_R = 0V, f = 1MHz$		0.3	0.5

(1). Non-repetitive current pulse, according to IEC61000-4-5.

■Ordering Information (Example)

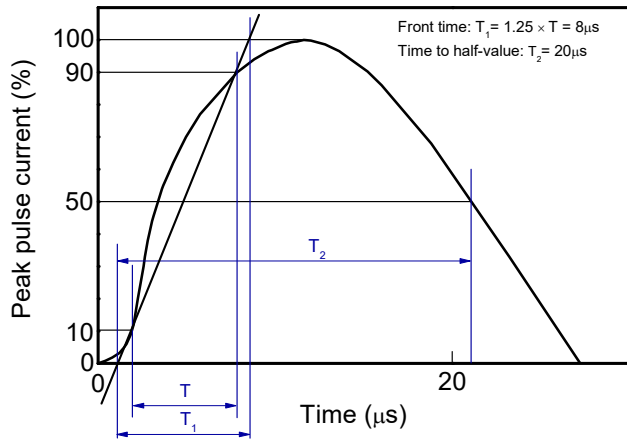
PREFERED P/N	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESDSL5V0LZS	Approximate 0.18	10000	100000	400000	Tape&reel



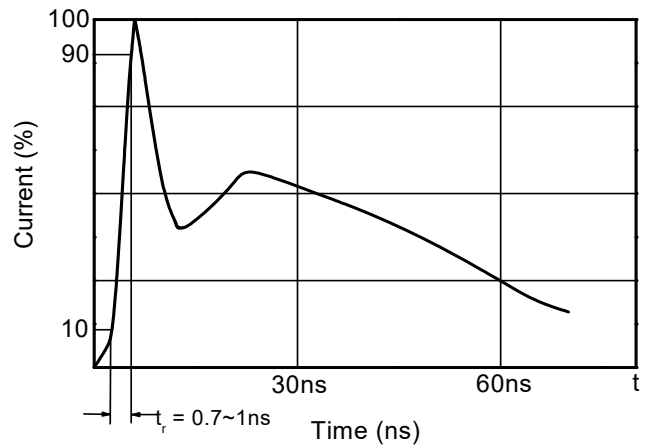
ESDSL5V0LZS

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

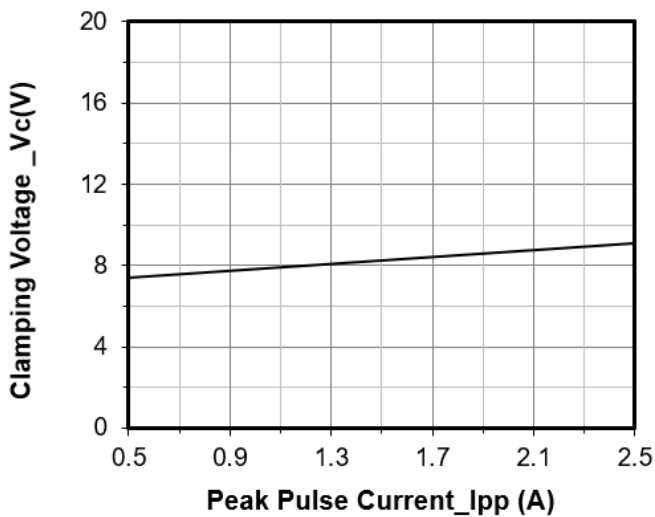
8/20μs waveform per IEC61000-4-5



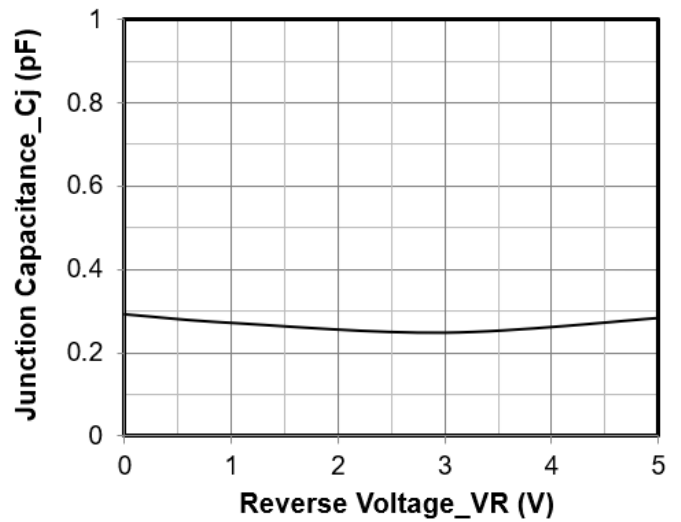
Contact discharge current waveform per IEC61000-4-2



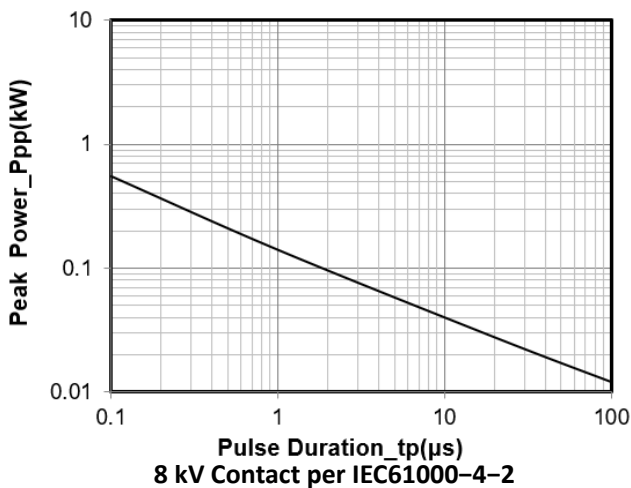
Clamping voltage vs. Peak pulse current



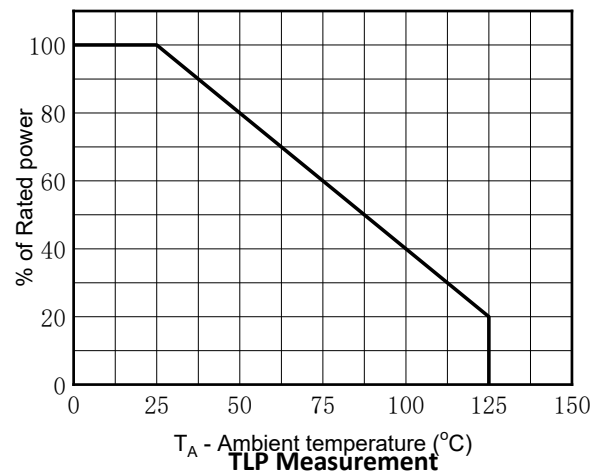
Capacitance vs. Reverse voltage



Non-repetitive peak pulse power vs. Pulse time

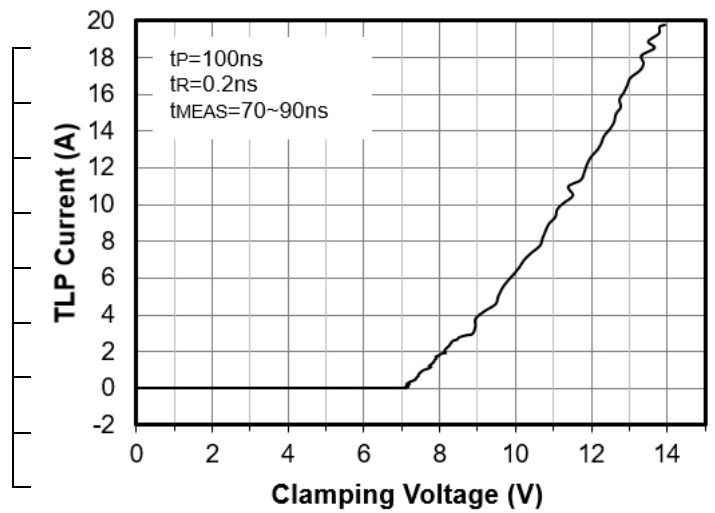
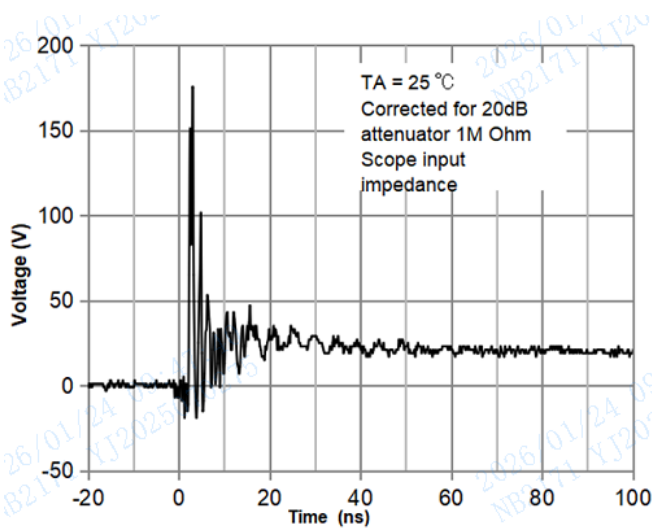


Power derating vs. Ambient temperature

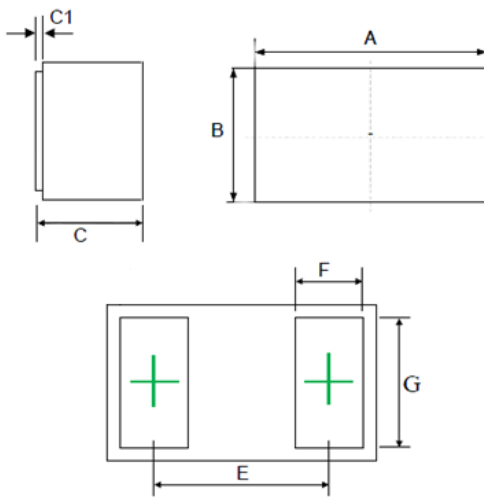




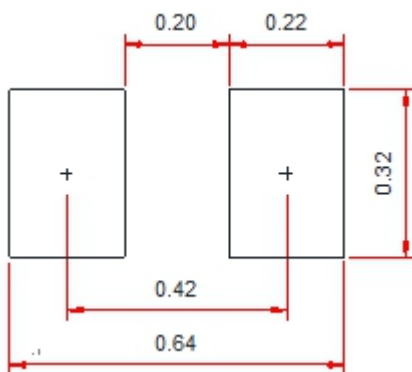
ESDSL5V0LZS



■ Outline Dimensions



■ Recommend land pattern (Unit:mm)



Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met



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