

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

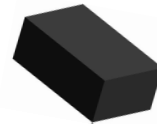
**DESCRIPTION**

SUESDL15VC-C is a low-capacitance Transient Voltage Suppressor (TVS) designed to provide electrostatic discharge (ESD) protection for high-speed data interfaces. With typical capacitance of 0.25pF, it is designed to protect parasitic-sensitive systems against over-voltage and over current transient events. It complies with IEC 61000-4-2 (ESD)Level 4, very fast charged device model (CDM) ESD and cable discharge event (CDE), etc.

It uses ultra-small DFNWB0603B package. Each device can protect one high-speed data line. It offers system designers flexibility to protect single data line where space is a premium concern.

The combined features of low capacitance, ultra-small size and high ESD robustness make SUESDL15VC-C ideal for high-speed data port and high-frequency line applications, such as cellular phones and HD visual devices.

**DFNWB0603B**



**FEATURES**

- Transient Protection for High-Speed Data Line
- Protects One I/O Line
- Low Leakage Current & Clamping Voltage
- Low Capacitance

**MARKING**

15BU

**PACKAGE INFORMATION**

Package	MPQ	Leader Size
DFNWB0603B	15K	7 inch

**RDER INFORMATION**

Part Number	Type
SUESDL15V-C	Lead (Pb)-free and Halogen-free

**MAXIMUM RATINGS** (T<sub>A</sub>=25°C unless otherwise noted.)

Parameter	Symbol	Rating	Unit
IEC 61000-4-2 ESD Voltage	V <sub>ESD</sub>	±20	kV
		±15	
Peak Pulsed Power	P <sub>PP</sub>	70	W
Operating Junction Temperature Range	T <sub>J</sub>	-55~125	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise noted.)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Stand-off Voltage	$V_{RWM}$	-	-	15	V	
Breakdown Voltage	$V_{(BR)}$	16	-	-	V	$I_T=1\text{mA}$
Reverse Leakage Current	$I_R$	-	-	500	nA	$V_{RWM}=15\text{V}$
Clamping Voltage @ $t_p=8/20\mu\text{s}$	$V_C$	-	-	25	V	$I_{PP}=1\text{A}$
		-	-	35		$I_{PP}=2\text{A}$
Junction Capacitance	$C_J$	-	0.25	0.4	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$

**CHARACTERISTICS CURVES**

Fig 1 8/20 $\mu\text{s}$  Waveform per IEC61000-4-5

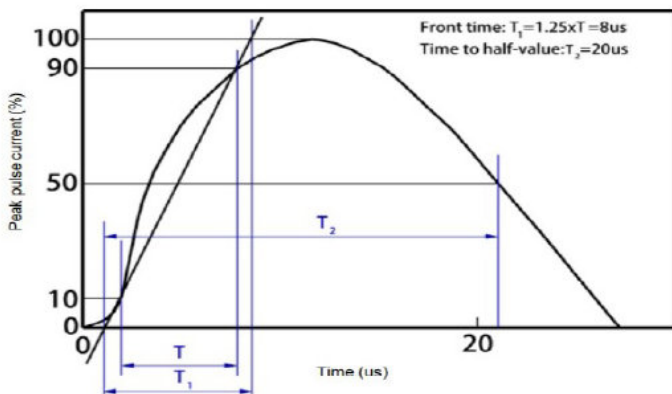


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

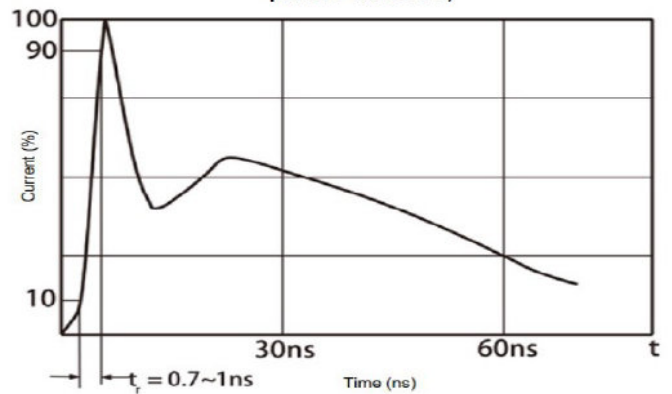


Fig 3 Voltage vs Capacitance

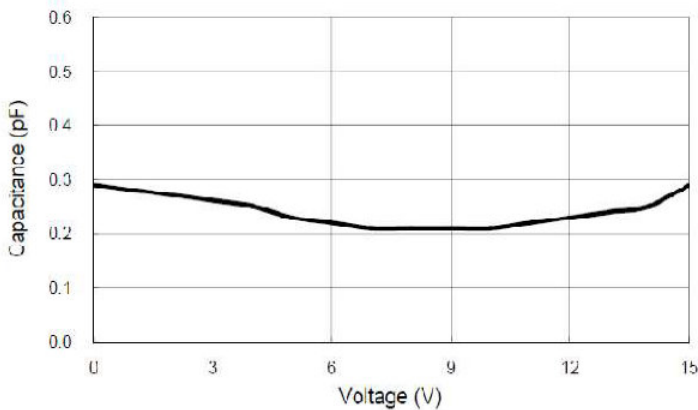
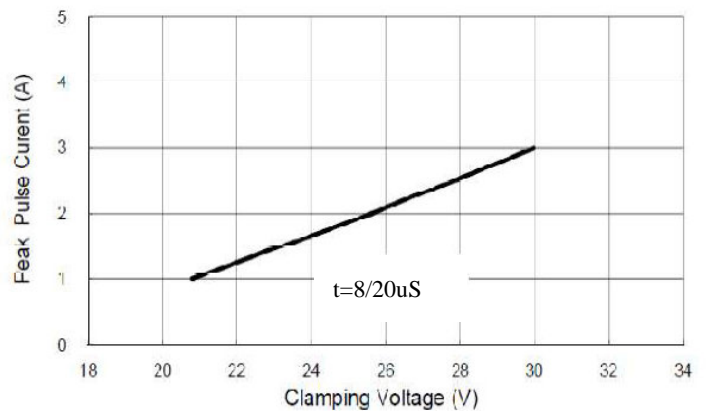
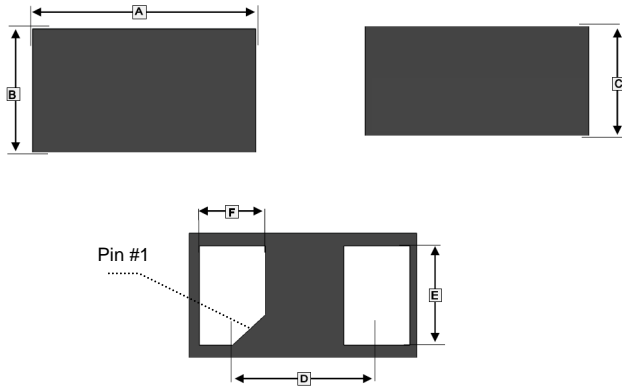


Fig 4 Clamping Voltage vs Peak Pulse Current



**PACKAGE OUTLINE DIMENSIONS**

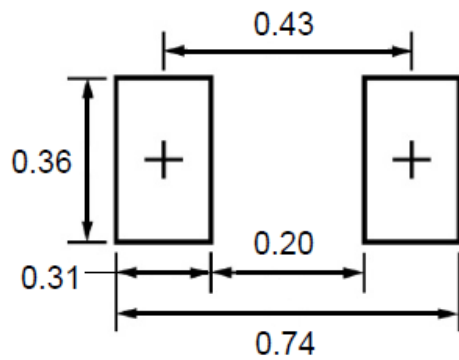
**DFNWB0603B**



REF.	Millimeter	
	Min.	Max.
A	0.55	0.67
B	0.25	0.37
C	0.27	0.34
D	0.36 REF.	
E	0.20	0.35
F	0.12	0.24

**MOUNTING PAD LAYOUT**

**DFNWB0603B**



\*Dimensions in millimeters