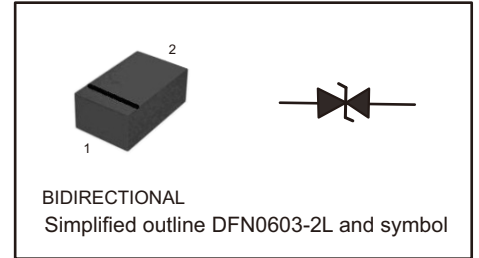




## Transient Voltage Suppressors for ESD Protection

### FEATURES

- Stand-off voltage:  $\pm 5V$  Max.
- Transient protection for each line according to  
IEC61000-4-2(ESD):  $\pm 30kV$  (contact)  
IEC61000-4-4 (EFT): 40A (5/50ns)  
IEC61000-4-5(surge): 8A (8/20 $\mu s$ )
- Ultra-low capacitance:  $C_J = 10pF$  typ.
- Low leakage current
- Low clamping voltage:  $V_C = 10V$  typ. @  $I_{PP} = 16A$  (TLP)

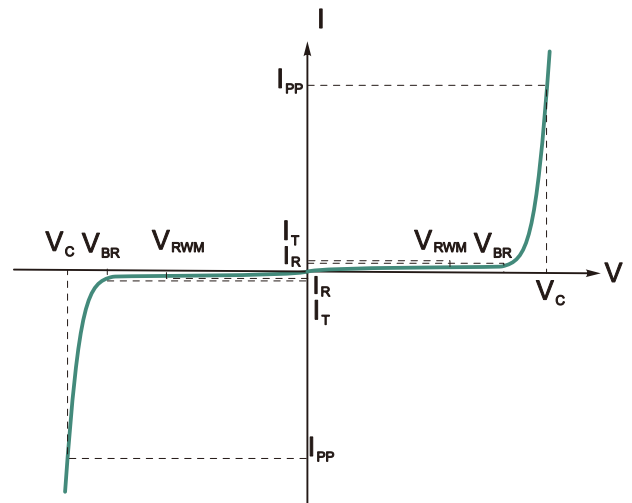


### Applications

- Computers and peripherals;
- Audio and video equipment;
- Communication systems;
- Portable electronics.

### Electronics Parameter

Parameter	Symbol
Maximum Reverse Peak Pulse Current	$I_{PP}$
Clamping Voltage @ $I_{PP}$	$V_C$
Peak Reverse Working Voltage	$V_{RWM}$
Reverse Leakage Current @ $V_{RWM}$	$I_R$
Breakdown Voltage @ $I_T$	$V_{BR}$
Test Current	$I_T$





MAXIMUM RATINGS (Ta =25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μS)	Ppk	96	W
Peak Pulse Current	Ipp	8	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	KV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55~ +125	°C
Storage Temperature Range	Tstg	-55~ +150	°C

ELECTRICAL CHARACTERISTICS ( TA = 25°C unless otherwise noted )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	VRWM				5	V
Breakdown Voltage	VBR	IT=1mA	5.3	6		V
Reverse Leakage Current	IR	V=VRWM , Ta=25°C			0.1	uA
Clamping Voltage	VC	IPP=1A , tp=8/20us			8	V
		IPP=8A , tp=8/20us			12	
		IPP=16A , tp=100ns		10		
Junction Capacitance	Cj	VR=0V , f=1HMz		10	13	pF
		VR=2.5V , f=1HMz		8	11	

Fig.1 Pulse Waveform

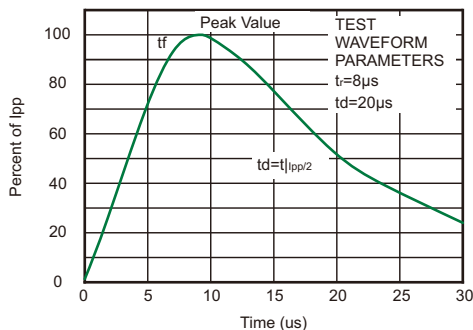
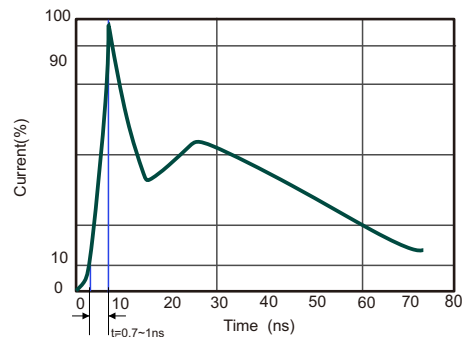
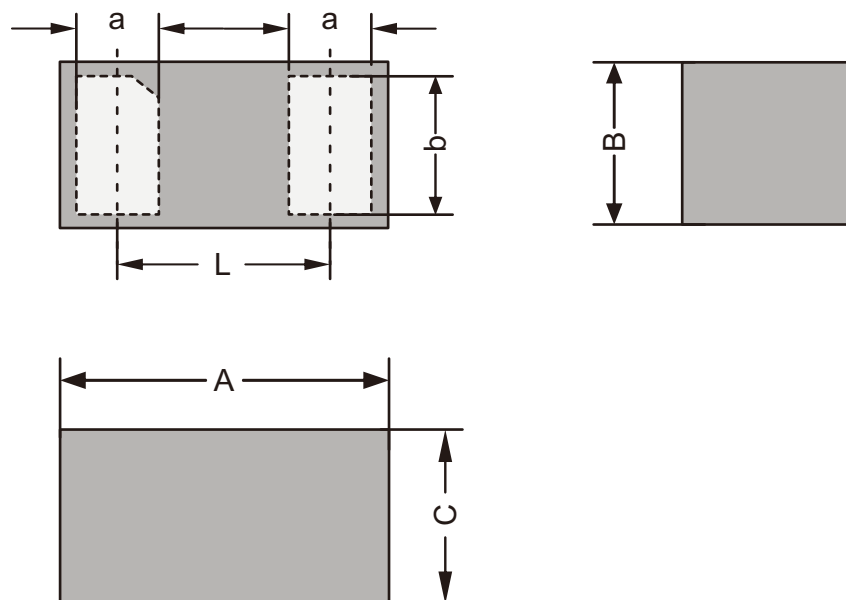


Fig.2 Contact discharge current waveform per IEC61000-4-2





DFN0603-2L Package Outline Dimensions



DFN0603-2L mechanical data

UNIT		A	B	C	a	b	L
mm	max	0.65	0.35	0.34	0.19	0.26	0.36
	min	0.58	0.28	0.28	0.13	0.20	
mil	max	25.59	13.78	13.39	7.48	10.24	14.17
	min	22.83	11.02	11.02	5.12	7.87	

Marking

Type number	Marking code
ESDB5V0DSP7A	A5



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