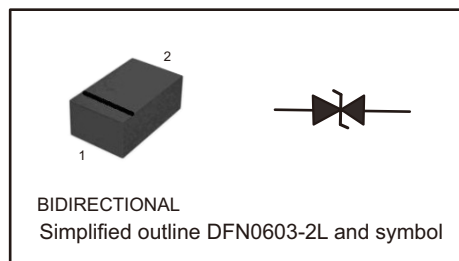




Transient Voltage Suppressors for ESD Protection

FEATURES

- Stand-off voltage: $\pm 3.3V$ 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): 9A (8/20 μs)
- Ultra-low capacitance: $C_J = 10pF$ typ.
- Low leakage current
- Low clamping voltage: $V_C = 9V$ typ. @ $I_{PP} = 16A$ (TLP)

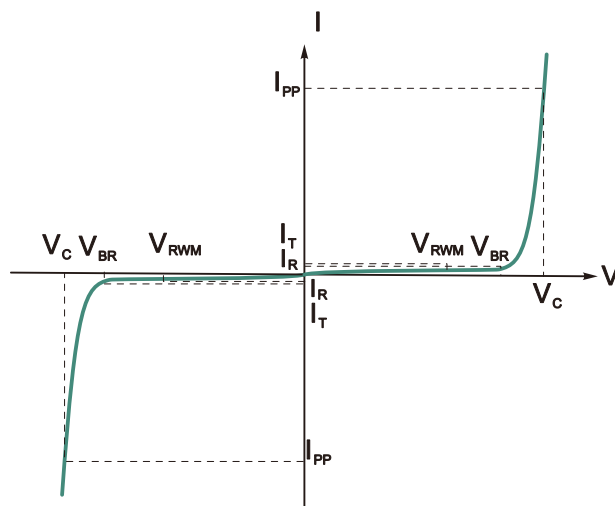


Applications

- Cellular handsets
- Tablets
- Laptops
- Other portable devices
- Network communication devices

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	90	W
Peak Pulse Current	Ipp	9	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-offvoltage	VRWM				3.3	V
Breakdown Voltage	VBR	IT=1mA	3.5	4		V
Reverse Leakage Current	IR	V=VRWM , Ta=25°C			0.1	uA
Clamping Voltage	VC	IPP=1A , tp=8/20us		4.5	6	V
		IPP=9A , tp=8/20us		8	10	
		IPP=16A , tp=100ns		9.0		
Junction Capacitance	Cj	VR=0V , f=1HMz		10	13	pF
		VR=2.5V , f=1HMz		8	11	pF

Fig.1 Pulse Waveform

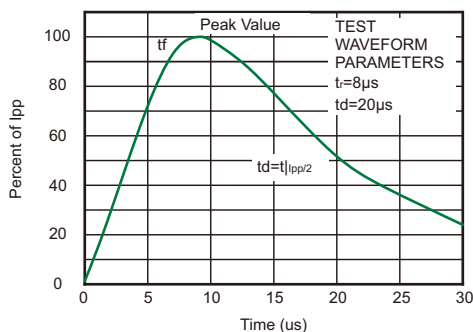
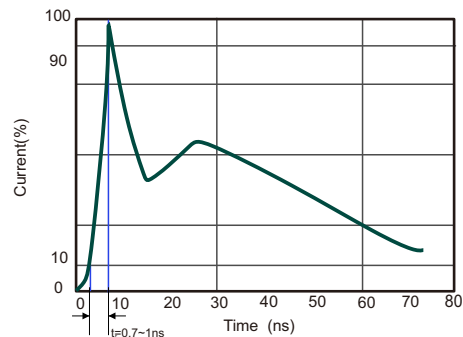
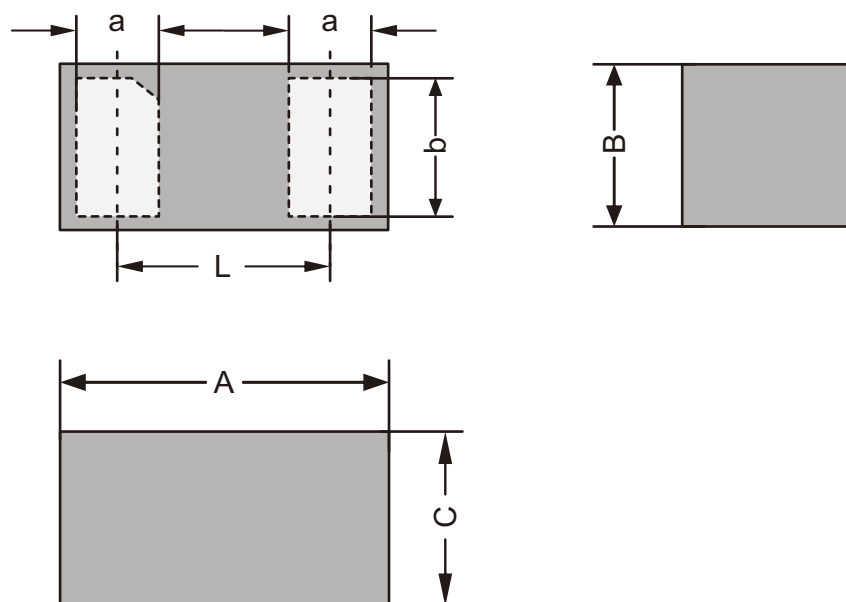


Fig.2 Contact discharge current waveform per IEC61000-4-2





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
ESDB3V3DSP1A	A3



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