



Transient Voltage Suppressors for ESD Protection

FEATURES

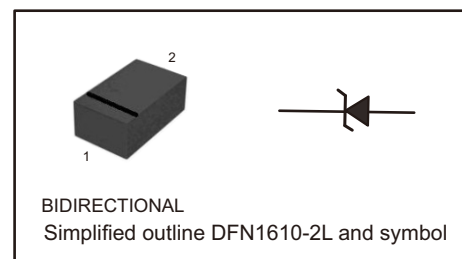
- Stand-off voltage: 7V Max
- Transient protection for each line according to
IEC61000-4-2(ESD): ±30kV (contact)
IEC61000-4-2(ESD): ±30kV (air)

Applications

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

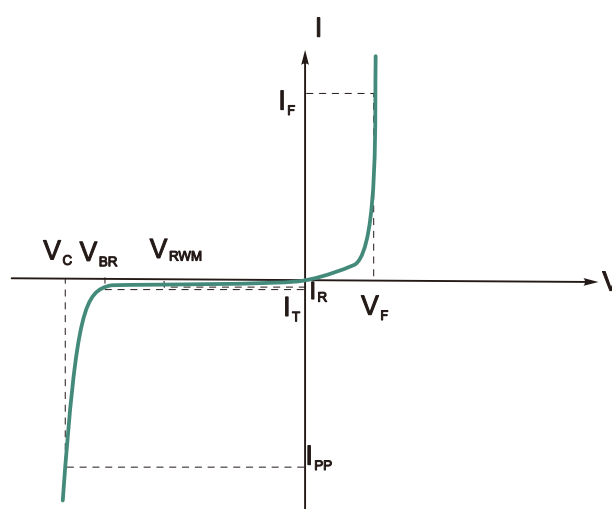
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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
Forward Current	I_F
Forward Voltage @ I_F	V_F





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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μS)	Ppk	1700	W
Peak Pulse Current	Ipp	100	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				7	V
Breakdown Voltage	VBR	IT=1mA	7.5	8.5	9.5	V
Reverse Leakage Current	IR	V=VRWM , Ta=25°C			0.2	uA
Clamping Voltage (Pin 1-Pin 2)	VC	IPP=100A , tp=8/20us		15.5	17	V
Clamping Voltage (Pin 2-Pin 1)	VC	IPP=100A , tp=8/20us		6	8	V
Forward Voltage	VF	IF=10mA		0.7		V
Junction Capacitance	Cj	VR=0V , f=1HMz		700	900	pF

Fig.1 Pulse Waveform

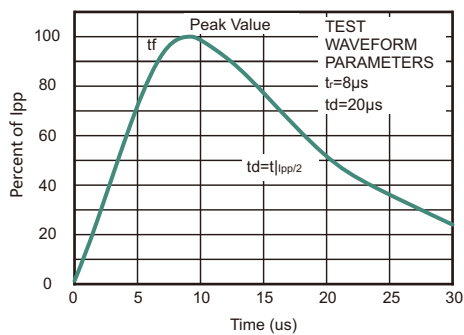
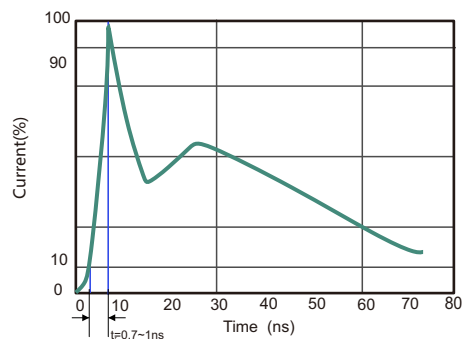
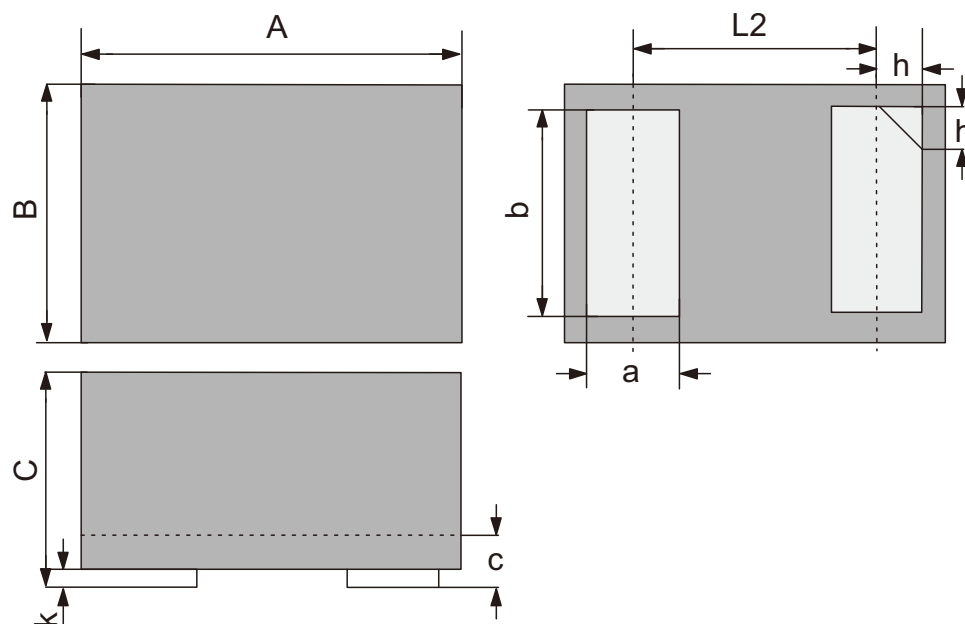


Fig.2 Contact discharge current waveform per IEC61000-4-2





DFN1610-2L Package Outline Dimensions



DFN1610-2L mechanical data

UNIT		A	B	C	L2	a	b	k	h	c
mm	max	1.65	1.05	0.55	1.10 REF	0.45	0.85	0.05	0.25	0.20
	min	1.55	0.95	0.45		0.35	0.75	0.00	0.15	0.10
mil	max	64.96	41.33	21.65	42.30 REF	17.71	33.46	1.97	9.84	7.87
	min	61.02	37.40	17.71		13.78	29.53	0	5.90	3.93

Marking

Type number	Marking code
ESD7V0DZA	7P



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