

ESDB0511P

Transient Voltage Suppressors

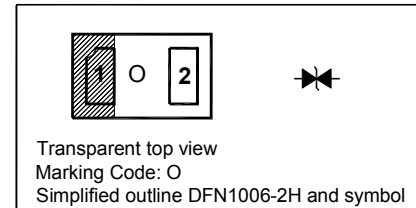
for ESD Protection

Features

- Low Clamping Voltage
- Low Leakage current
- Protects one I/O or power line
- Bi-direction high reliability

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
IEC61000-4-2 (ESD) Air Contact	V_{ESD}	± 15 ± 8	KV
Peak Pulse Current ($t_p = 8/20 \text{ us}$)	I_{PP}	12	A
Peak Pulse Power ($t_p = 8/20 \text{ us}$)	P_{pk}	170	W
Junction Temperature	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

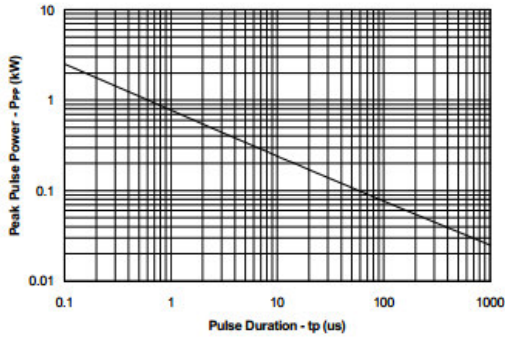
Type	Reverse Stand-off Voltage	Reverse Current	Breakdown Voltage			Clamping Voltage	Reverse Peak Pulse Current	Capacitance		
	V_{RWM}	I_{R} at V_{RWM}	V_{BR}		at I_{T}	V_{C} at I_{PP}	I_{PP}	C_j	at f	at V_{R}
	Max. (V)	Max. (μA)	Min. (V)	Max. (V)	(mA)	Max. (V)	(A)	Max. (pF)	(MHz)	(V)
ESDB0511P	5	1	6	10	1	11	1	75	1	0
						14	12			

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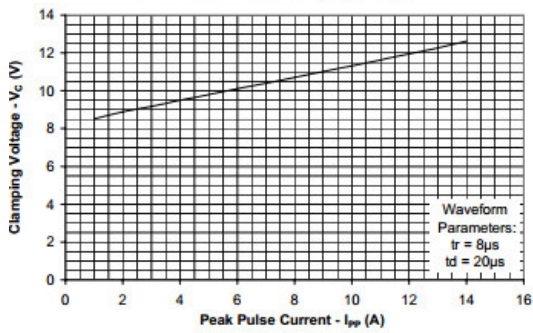
Non-Repetitive Peak Pulse Power vs. Pulse Time



Clamping Voltage vs. Peak Pulse Current

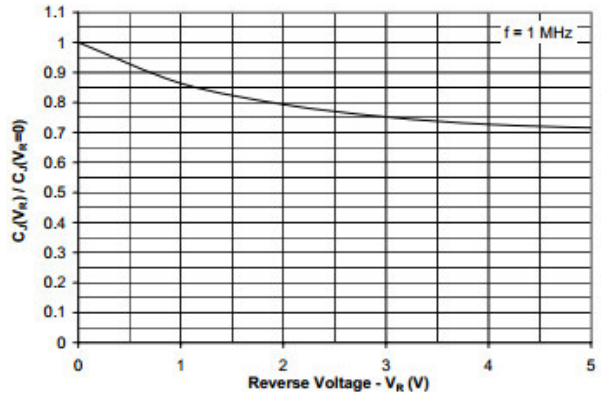
Clamping Voltage vs. Peak Pulse Current

Peak Pulse Current vs. Clamping Voltage



Junction Capacitance vs. Reverse Voltage

Junction Capacitance vs. Reverse Voltage

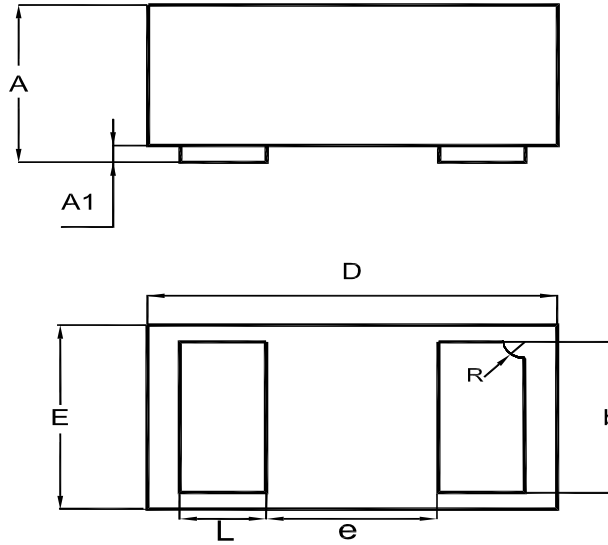


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PACKAGE OUTLINE

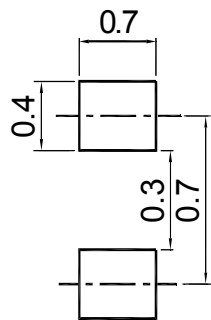
Plastic surface mounted package

DFN1006-2H



UNIT	A	A1	b	D	E	e	L	R
mm	0.51	0.05	0.55	1.05	0.65	0.4	0.3	0.15
	0.46	0	0.45	0.95	0.55		0.2	0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2H	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

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