

ESDBL0531P

Transient Voltage Suppressors

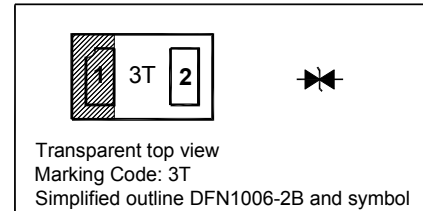
for ESD Protection

Features

- Low Clamping Voltage
- Low operating voltage
- 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}	± 20 ± 12	KV
Peak Pulse Current ($t_p = 8/20 \text{ us}$)	I_{PP}	4	A
Peak Pulse Power ($t_p = 8/20 \text{ us}$)	P_{pk}	80	W
Operating Temperature	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

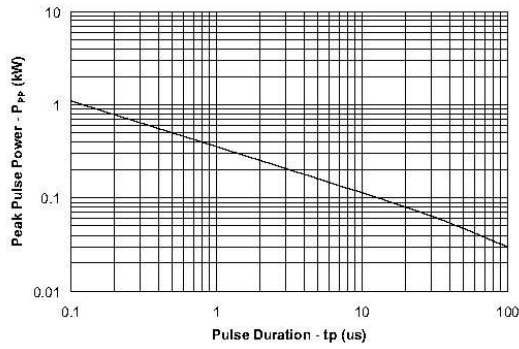
Type	Reverse Stand-off Voltage	Reverse Current	Reverse Breakdown Voltage			Clamping Voltage	Reverse Peak Pulse Current	Capacitance		
	V_{RWM}	I_{R} at V_{RWM}	V_{BR}		at I_{T}	V_{C} at $\text{Max. } I_{\text{PP}}$	I_{PP}	C_j	at f	at V_{R}
	Max. (V)	Max. (μA)	Min. (V)	Max. (V)	(mA)	Max. (V)	Max. (A)	Max. (pF)	(MHz)	(V)
ESDBL0531P	5	0.1	6	11	1	12	1	0.8	1	0
						20	4			

TOP DYNAMIC

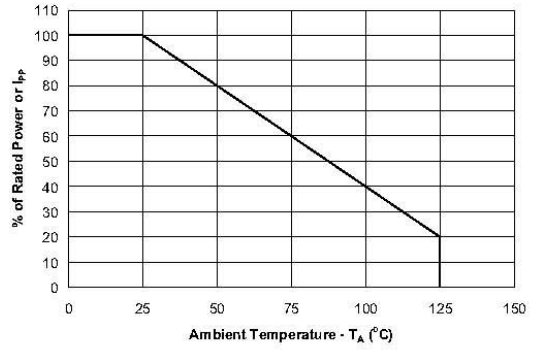


Dated: 18/05/2015 Rev: 02

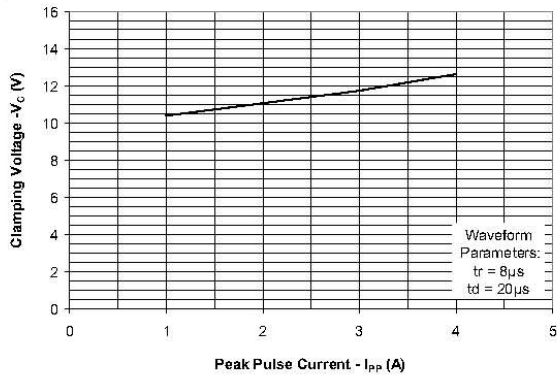
Non-Repetitive Peak Pulse Power vs. Pulse Time



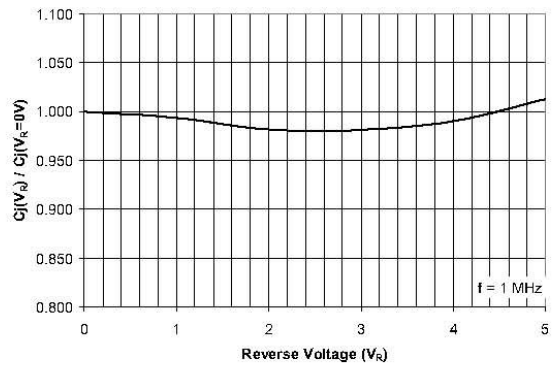
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current



Normalized Capacitance vs. Reverse Voltage



TOP DYNAMIC

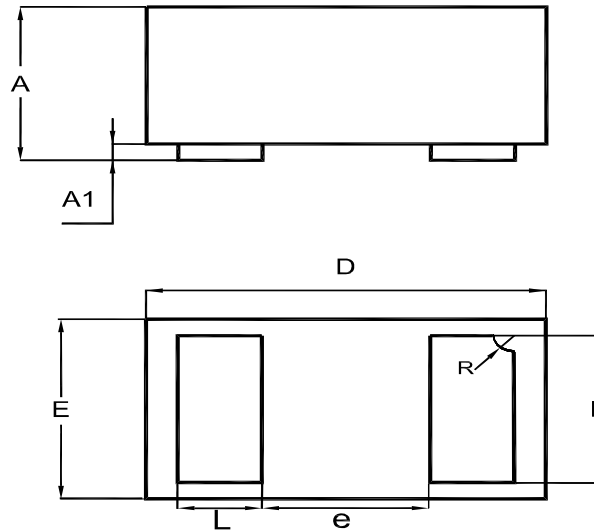


ESDBL0531P

PACKAGE OUTLINE

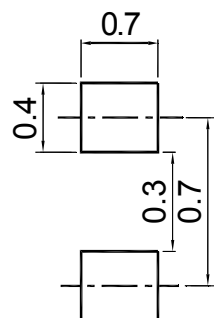
Plastic surface mounted package; 2 leads

DFN1006-2B



UNIT	A	A1	b	D	E	e	L	R
mm	0.40	0.05	0.55	1.05	0.65	0.4	0.3	0.15
	0.36	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	
DFN1006-2B	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000

TOP DYNAMIC



Dated: 18/05/2015 Rev: 02