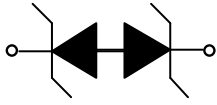


1-Line, Bi-directional, Transient Voltage Suppressor



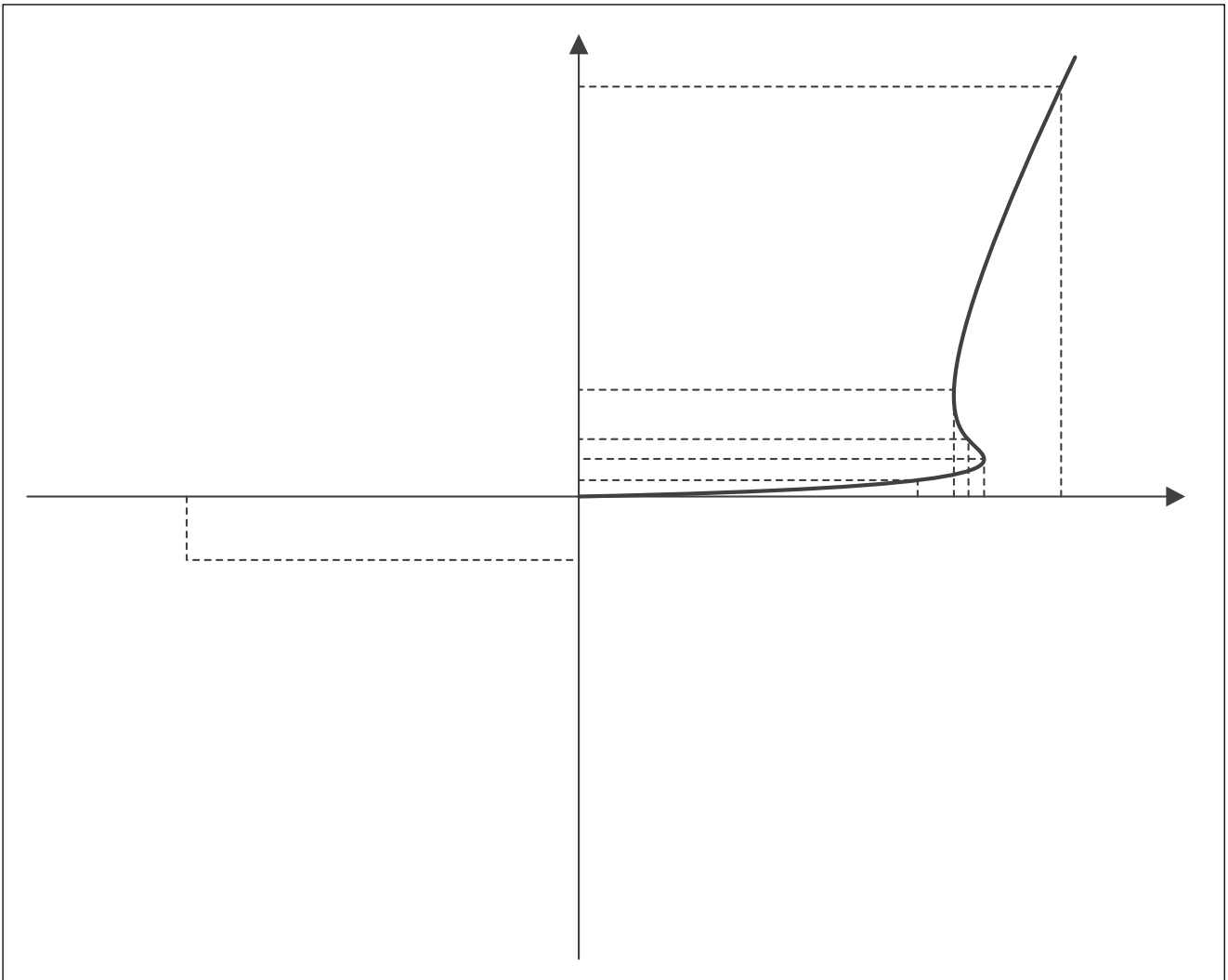
Features

- " Stand-off voltage: $\pm 12V$ 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): 6A (8/20 s)
- " Ultra-low capacitance: $C_J = 5pF$ typ
- " Low leakage current
- " Low clamping voltage: $V_{CL} = 21.0V$ typ. @ $I_{PP} = 16A$ (TLP)
- " Solid-state silicon technology

Mechanical Data

- " Package : DFN1006-2L
- " Terminals : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- " Polarity: No marking on bi-directional types
- " Marking: cD

VDefinitions of electrical characteristics



ESDLC12VLB

Maximum Ratings

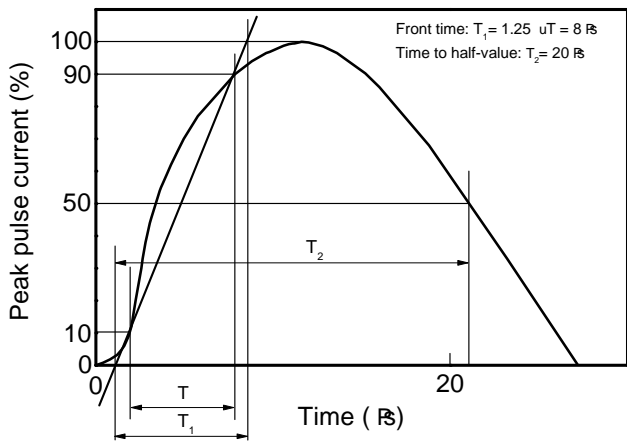
PARAMETER	SYMBOL	Rating	UNIT
Peak pulse power ($t_p = 8/20$ s)	P_{pk}	120	W
Peak pulse current ($t_p = 8/20$ s)	I_{PP}	6	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	KV
ESD according to IEC61000-4-2 contact discharge		± 30	KV
Junction temperature	T_J	125	$^{\circ}\text{C}$
Operating temperature	T_{OP}	-40~85	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics $\dot{A}T_a=25$ Unless otherwise specified \dot{A}

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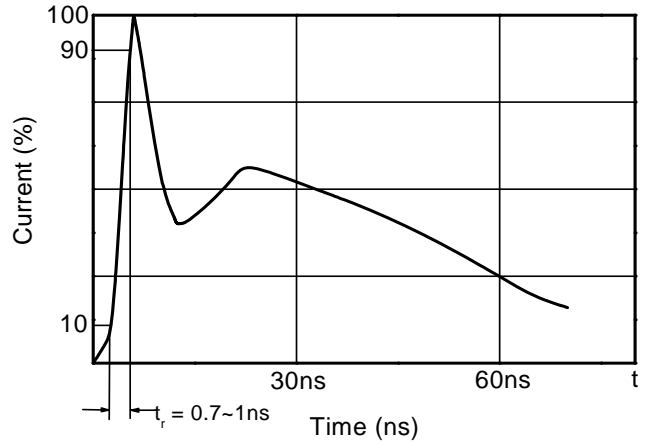
vCharacteristics (Typical)

820 ns waveform per IEC61000-4-5

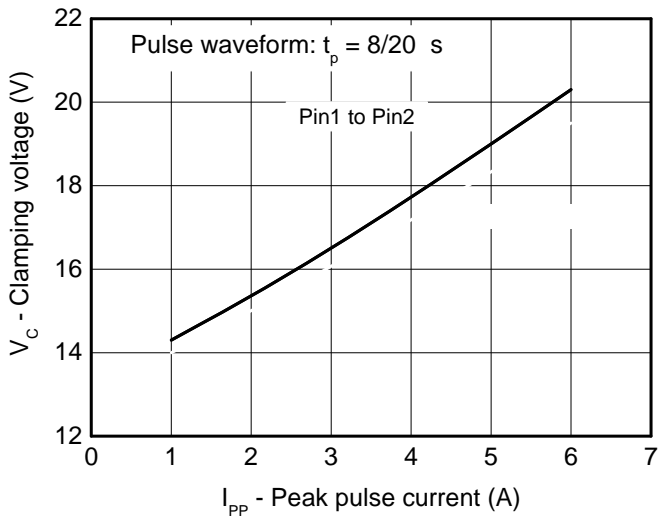


Clamping voltage vs. Peak pulse current

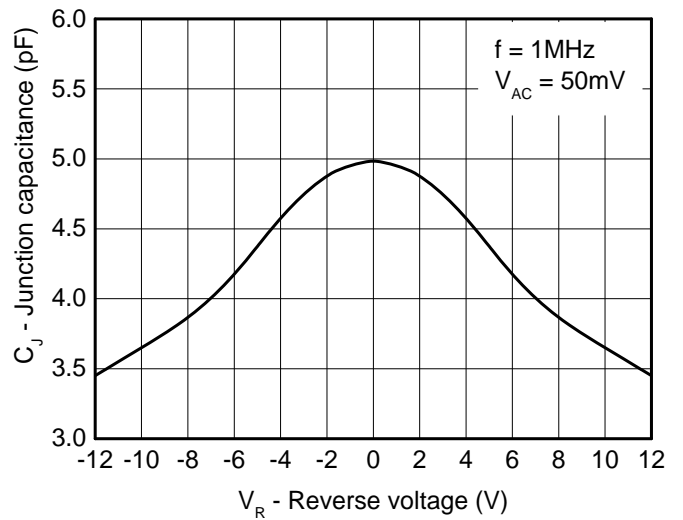
Contact discharge current waveform per IEC61000-4-2



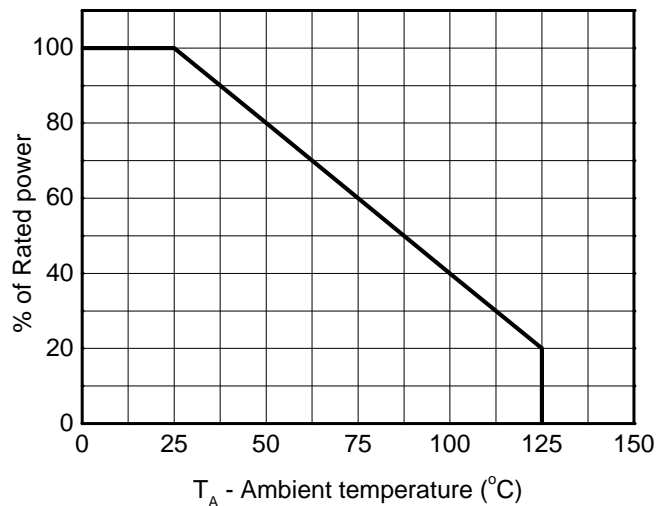
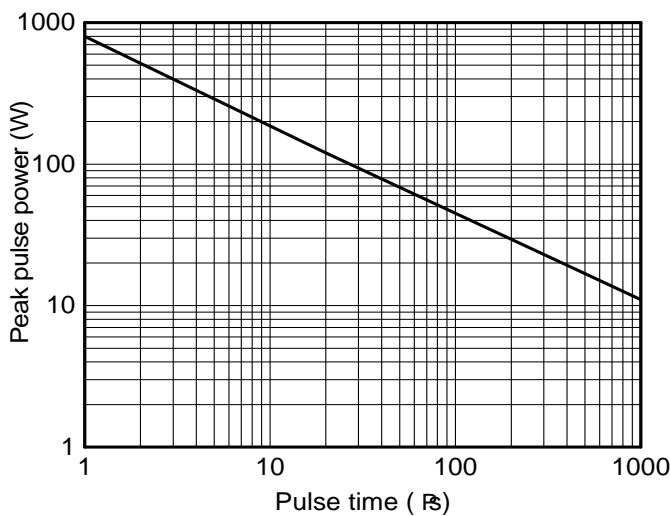
Capacitance vs. Reverse voltage



Non repetitive peak pulse power vs. Pulsetime



Power derating vs. Ambient temperature

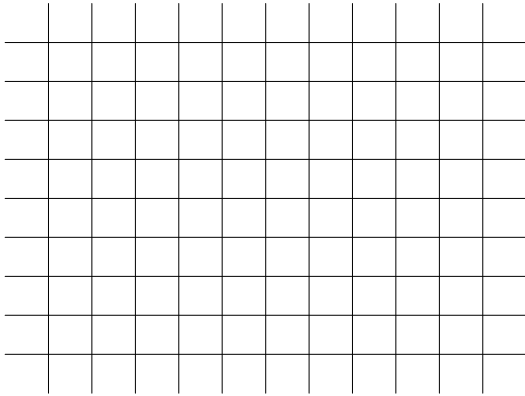


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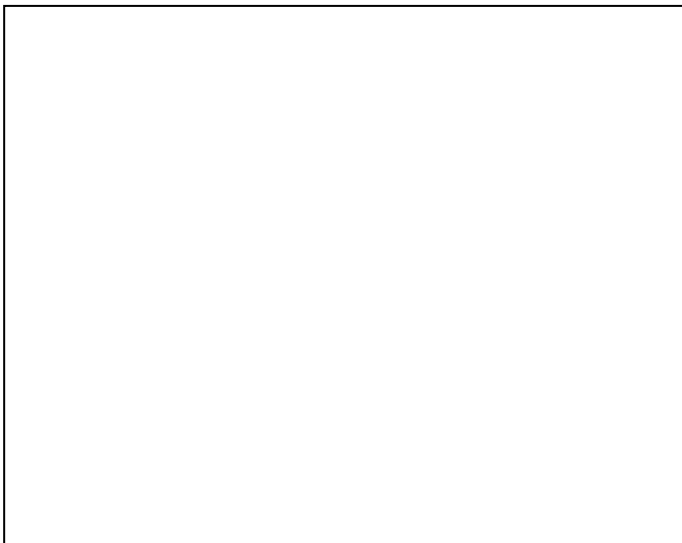
ESDclamping
(+8kVcontact dischargeper IEC610004 2)

ESDclamping
(8kVcontact dischargeper IEC610004 2)

TLPMeasurement



vOutline Dimensions



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ESDLC12VLB

vRecommend land pattern (Unit:mm)

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met

ESDLC12VLB

Disclaimer

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