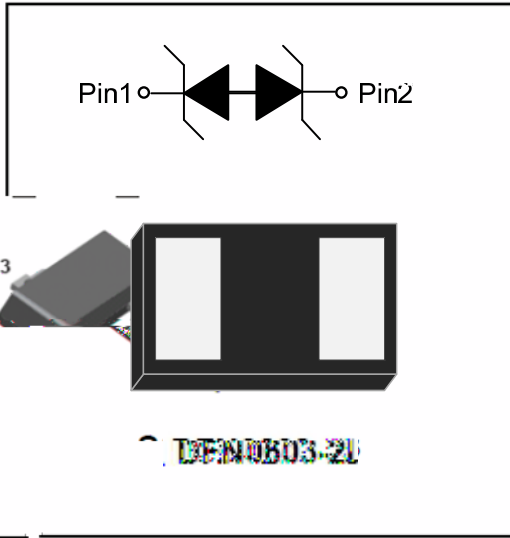


1-Line, Bi-directional, Transient Voltage Suppressor



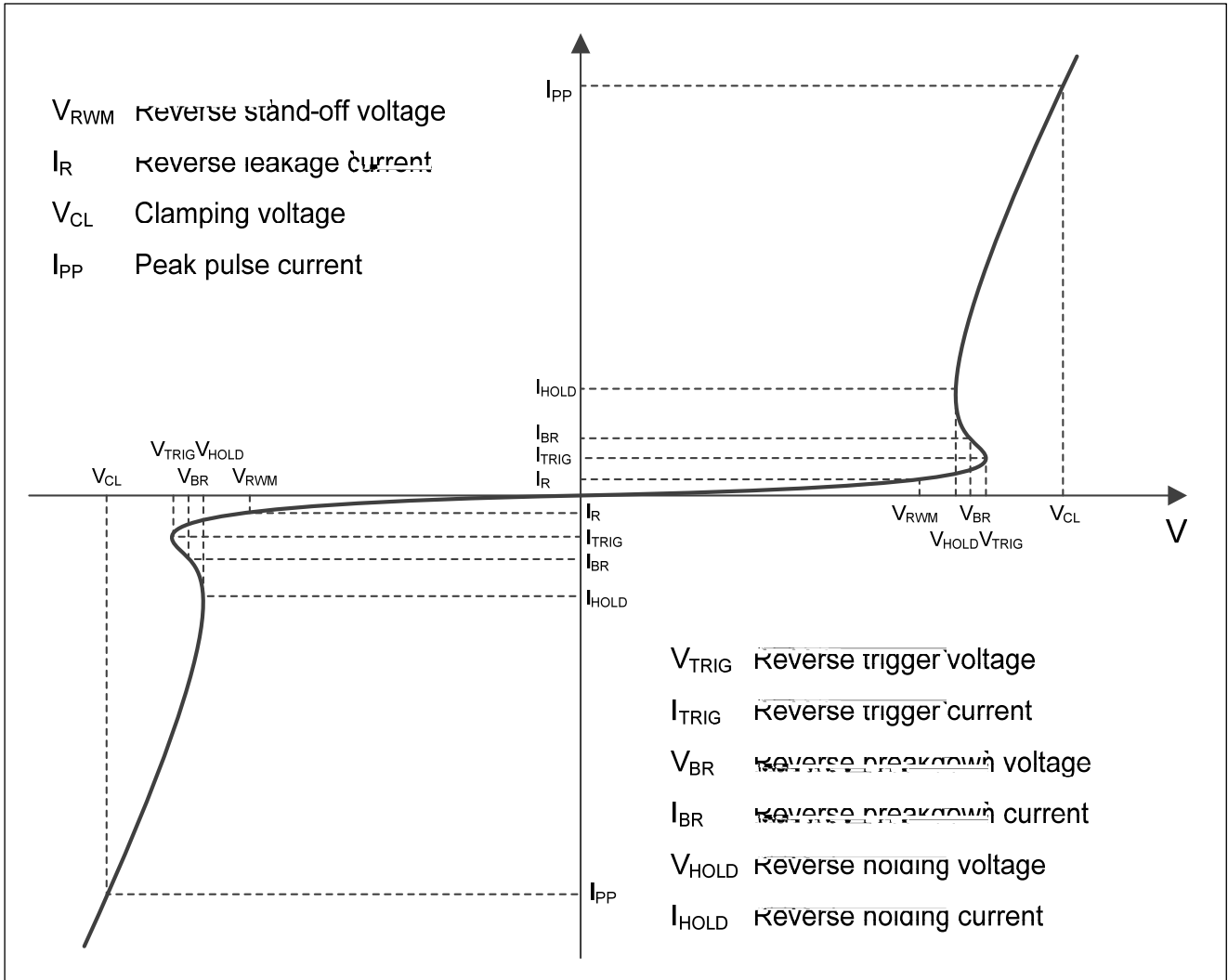
Features

- " Stand-off voltage: $\pm 5V$ 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): 3.5A (8/20 s)
- " Ultra-low capacitance: $C_J = 3pF$ typ
- " Low leakage current
- " Low clamping voltage: $V_{CL} = 15.0V$ typ. @ $I_{PP} = 16A$ (TLP)
- " Solid-state silicon technology

Mechanical Data

- " **Package:** DFN0603-2L
- " **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- " **Polarity:** No marking on bi-directional types
- " **Marking:** C5

Definitions of electrical characteristics





ESDLC5V0LZB

Maximum Ratings

PARAMETER	SYMBOL	Rating	UNIT
Peak pulse power ($t_p = 8/20$ s)	P_{pk}	41	W
Peak pulse current ($t_p = 8/20$ s)	I_{pp}	3.5	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	$^{\circ}C$
Operating temperature	T_{OP}	-40~85	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

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

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				± 5
Reverse leakage current	I_R	nA	$V_{RWM} = 5V$			100
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	5.3		
Reverse holding voltage	V_{HOLD}	V	$I_{BR} = 1mA$			



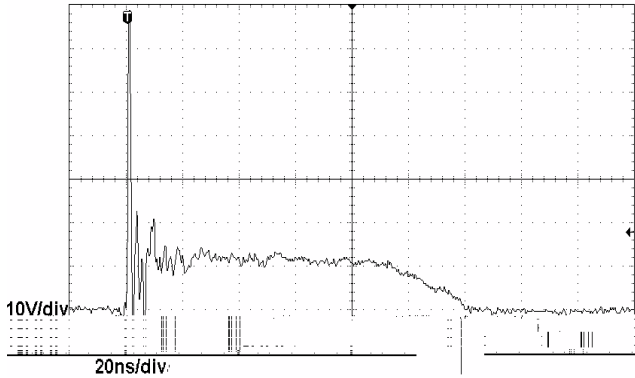
vCharacteristics (Typical)

8/20 s waveform per IEC61000 4 5

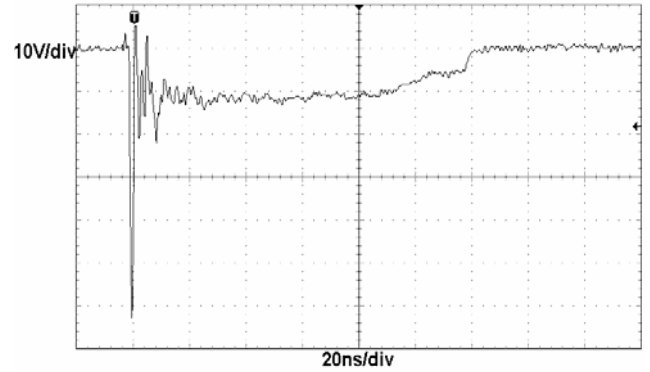


ESDLC5V0LZB

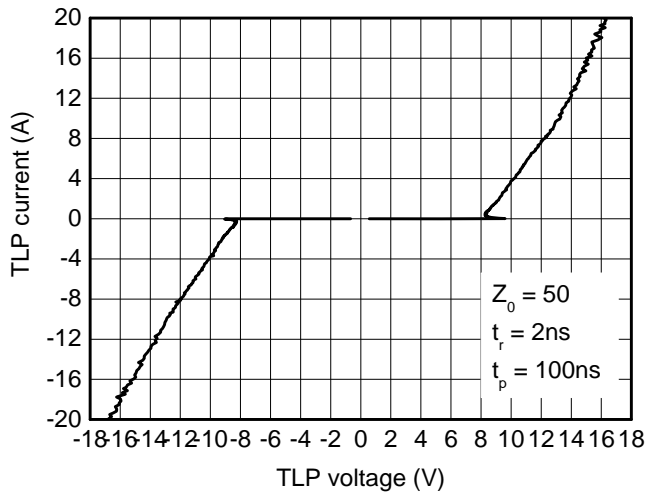
ESD clamping
(+8kV contact discharge per IEC61000 # 2)



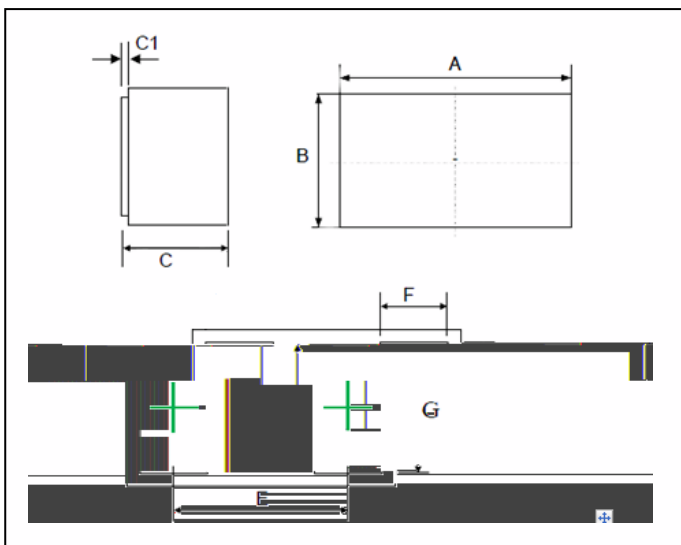
ESD clamping
(-8kV contact discharge per IEC61000 # 2)



TLP Measurement



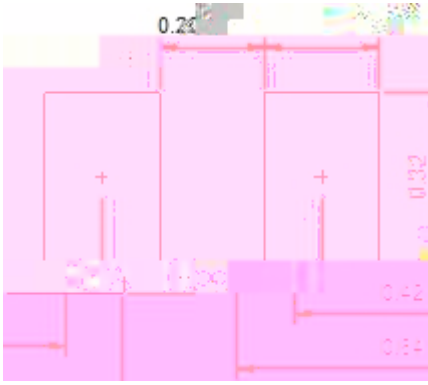
v Outline Dimensions



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Recommend 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

