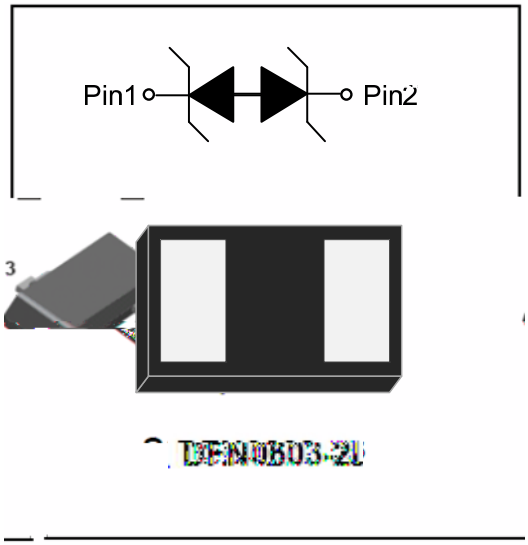
1-Line, Bi-directional, Transient Voltage Suppressor



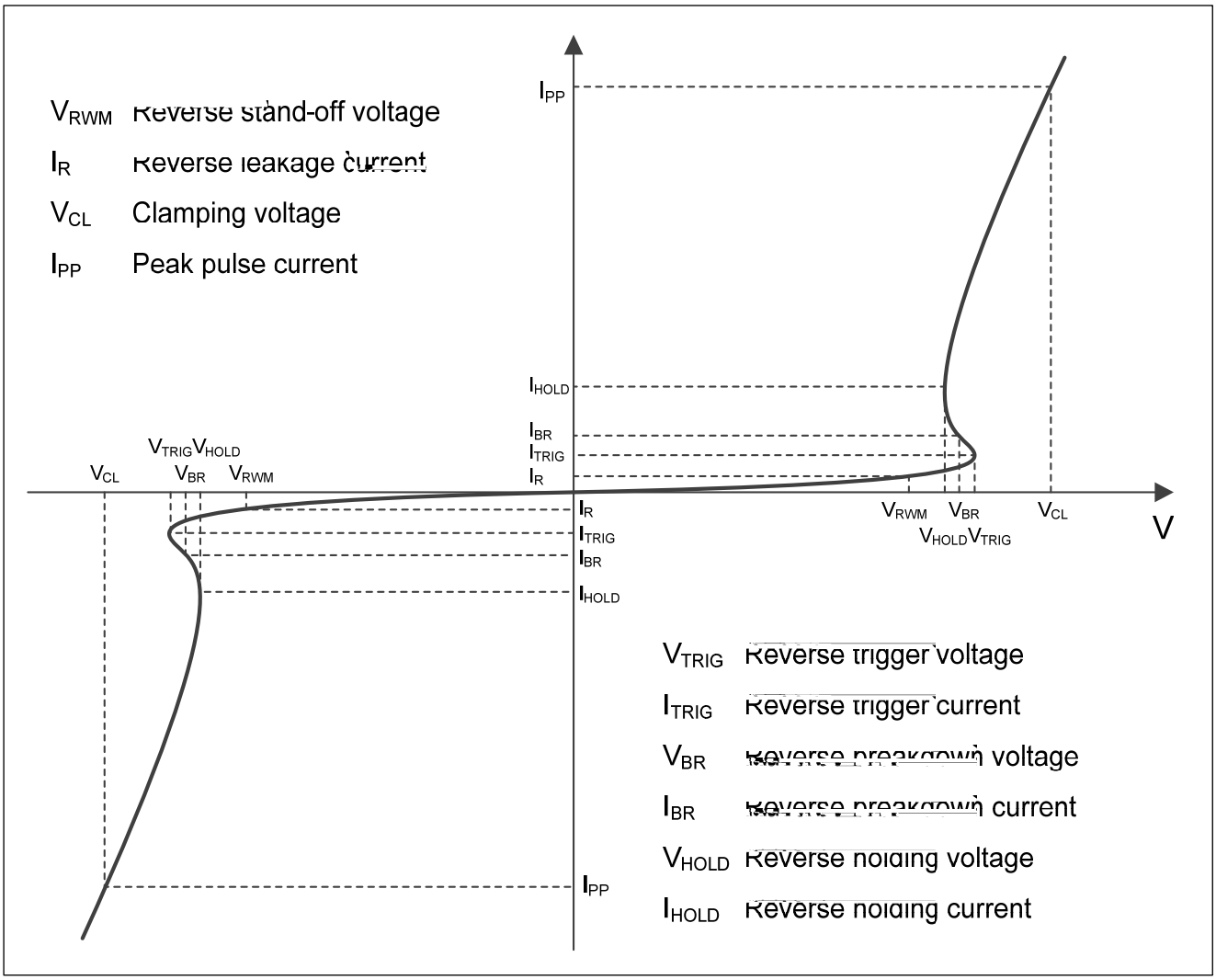
Features

” Stand-off voltage: ±5V Max
” Transient protection for each line according to IEC61000-4-2(ESD): ±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



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	°C
Operating temperature	T_{OP}	-40~85	°C
Storage temperature	T_{STG}	-55~150	°C

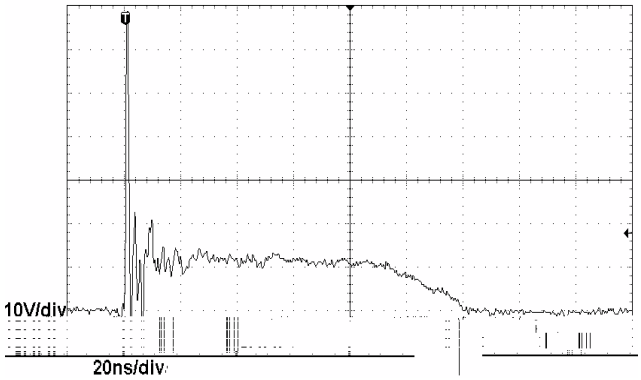
Electrical Characteristics ÄTa=25 Unless otherwise specified Å

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	IB\22.74T43.508 461.akdo = 1mA			26.1881.2( )-3

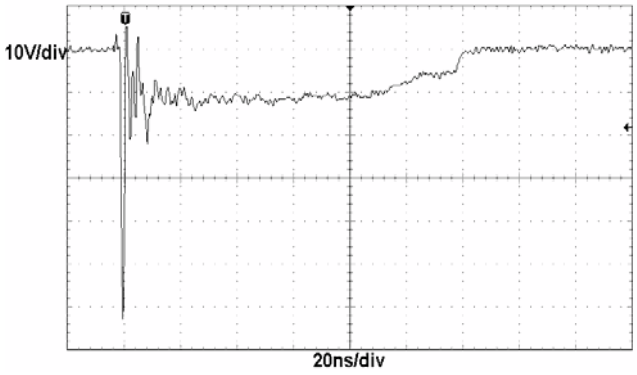
v Characteristics (Typical)

8/20 s waveform per IEC61000 4 5

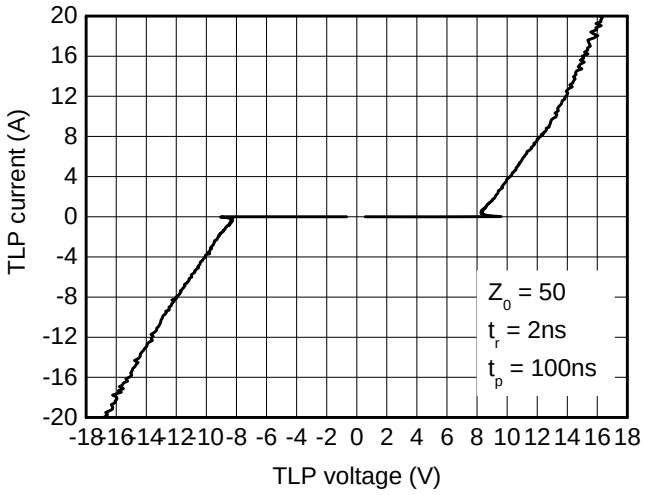
ESD clamping
(+8kV contact discharge per IEC61000 4 2)



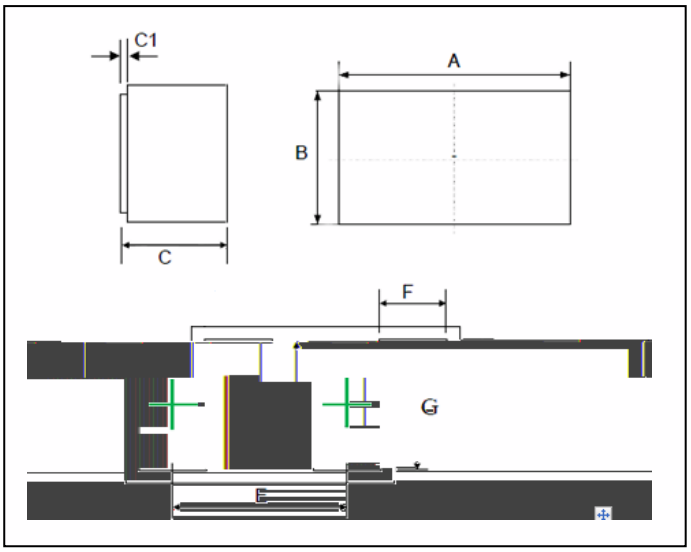
ESD clamping
(8kV contact discharge per IEC61000 4 2)



TLP Measurement



vOutline Dimensions



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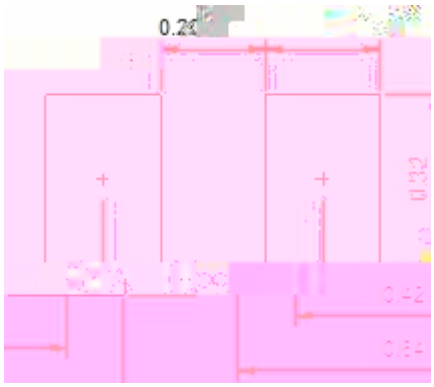
Recommend land pattern (Unit:mm)



Notes:

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