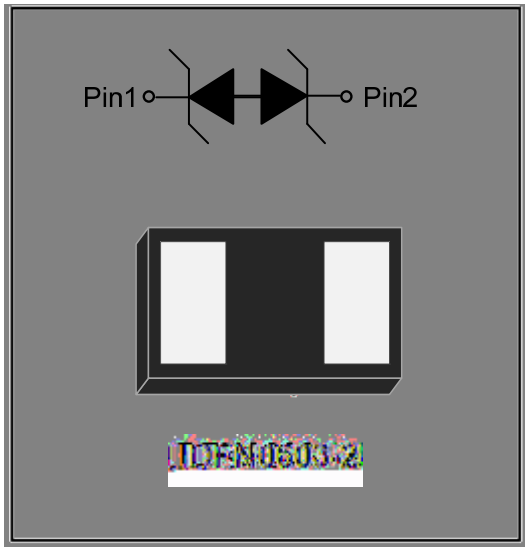
1-Line, Bi-directional, Transient Voltage Suppressor



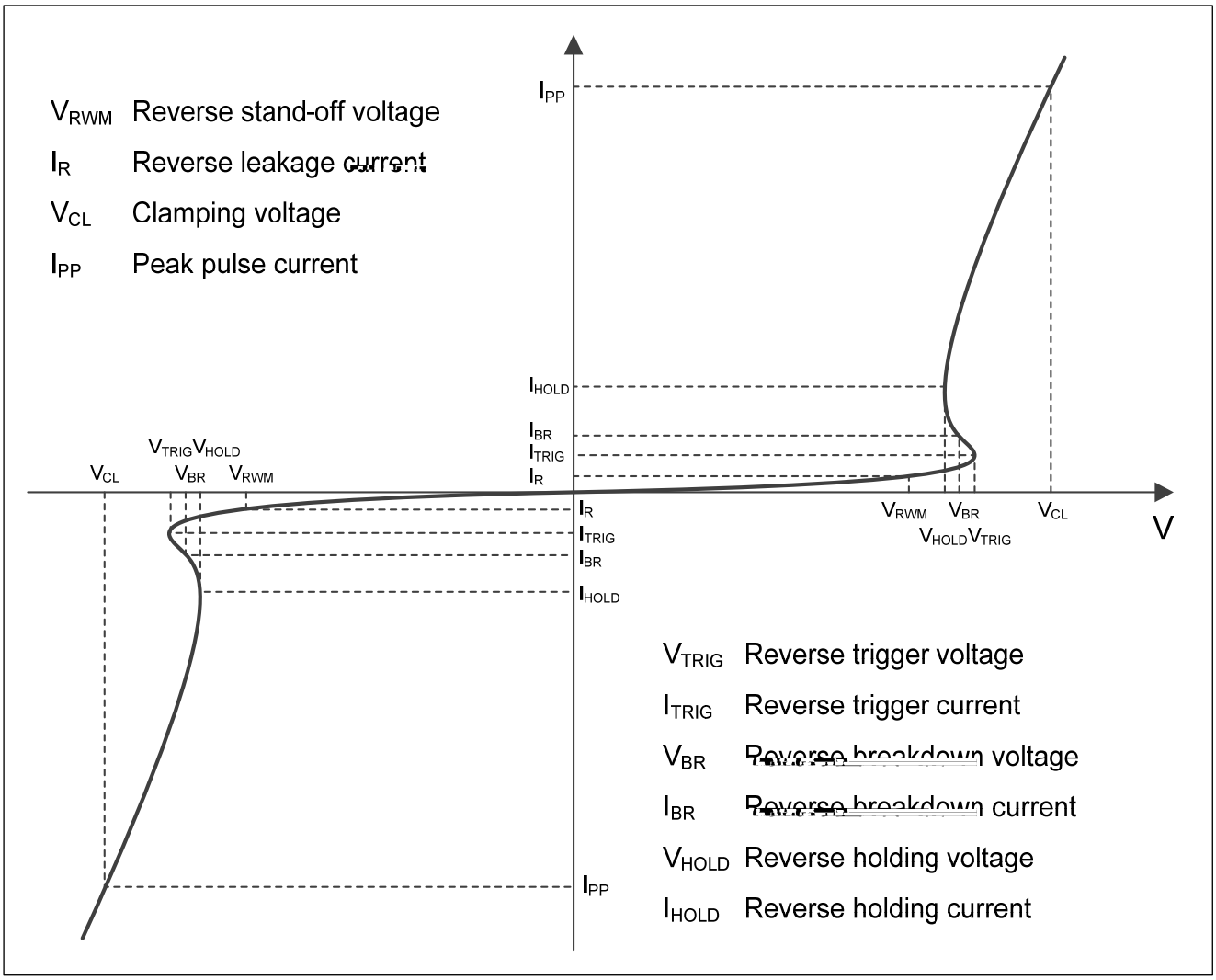
Features

- 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 (8/20μs)
- 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

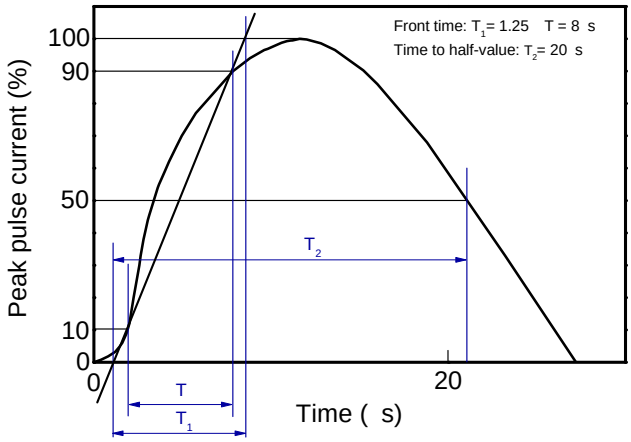
PARAMETER	SYMBOL	Rating	UNIT
Peak pulse power (t_p = 8/20μs)	P_{pk}	41	W
Peak pulse current (t_p = 8/20μs)	I_{PP}	3.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	±30	KV
ESD according to IEC61000-4-2 contact discharge		±30	KV
Junction temperature	T_J	125	°C
Operating temperature	T_{OP}	-40~85	°C
Storage temperature	T_{STG}	-55~150	°C

■Electrical Characteristics T_a=25 Unless otherwise specified

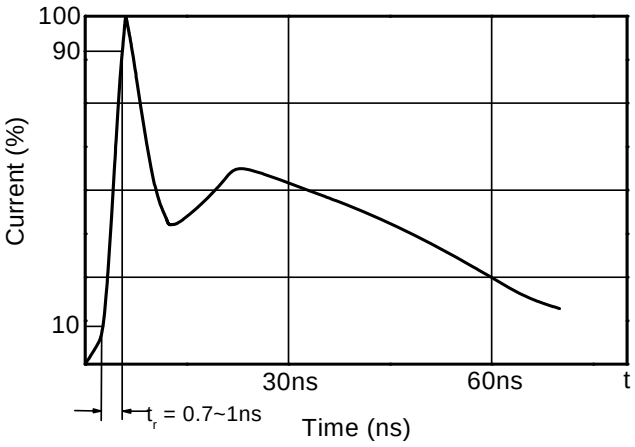
PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				±5
Reverse leakage current	I_R	nA	V_{RWM} =5V			100
Reverse breakdown voltage	V_{BR}	V	I_{BR} = 1mA	5.3		
Reverse holding voltage	V_{HOLD}	V	I_{HOLD}			

■ Characteristics (Typical)

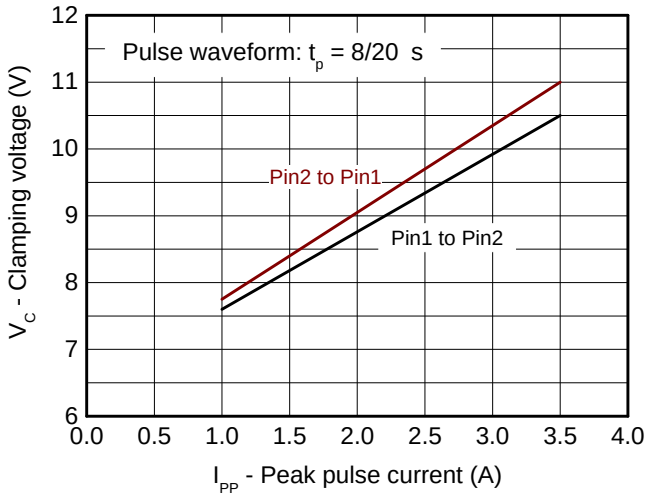
8/20 s waveform per IEC61000-4-5



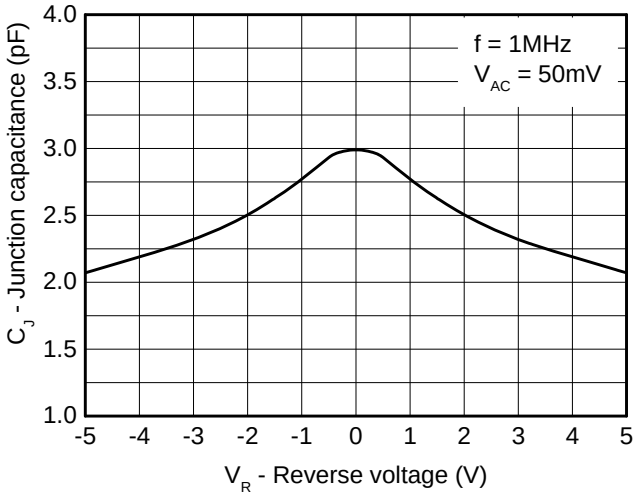
Contact discharge current waveform per IEC61000-4-2



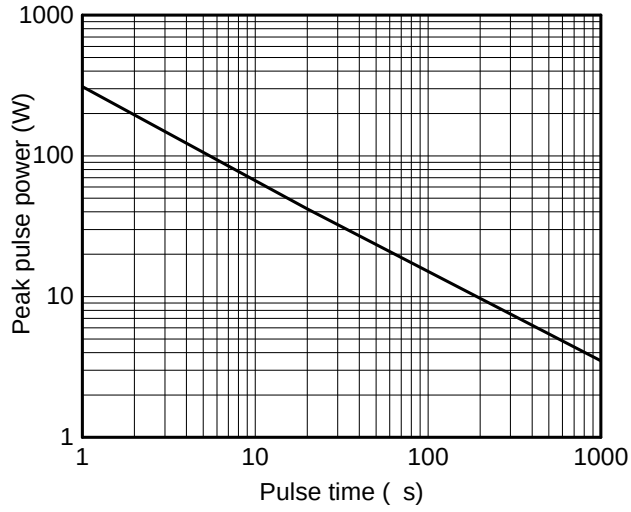
Clamping voltage vs. Peak pulse current



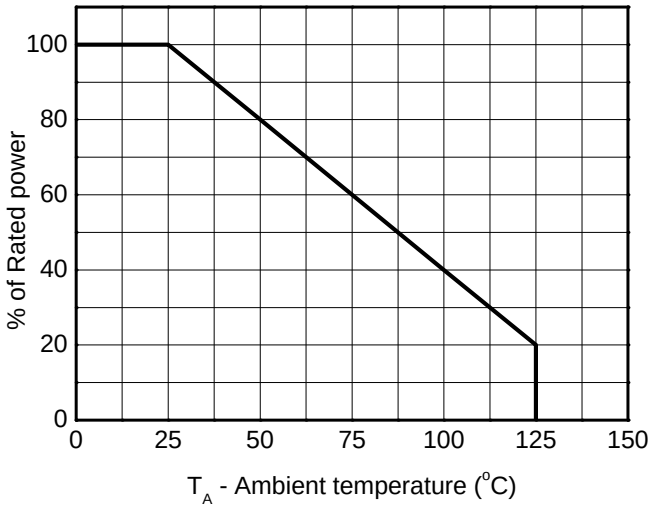
Capacitance vs. Reverse voltage



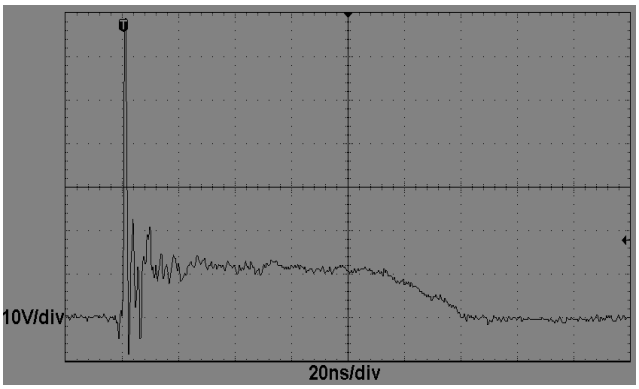
Non-repetitive peak pulse power vs. Pulse time



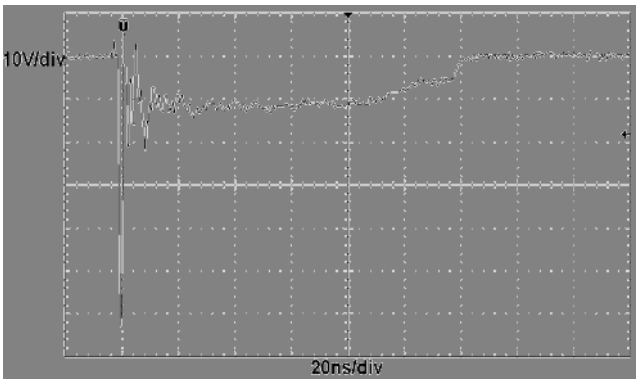
Power derating vs. Ambient temperature



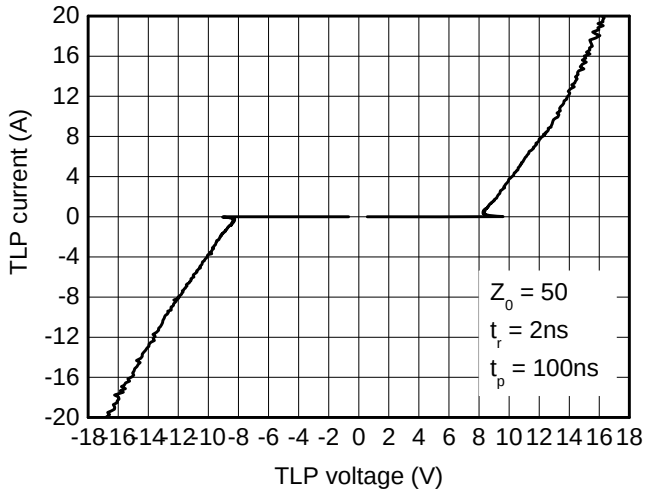
ESD clamping
(+8kV contact discharge per IEC61000-4-2)



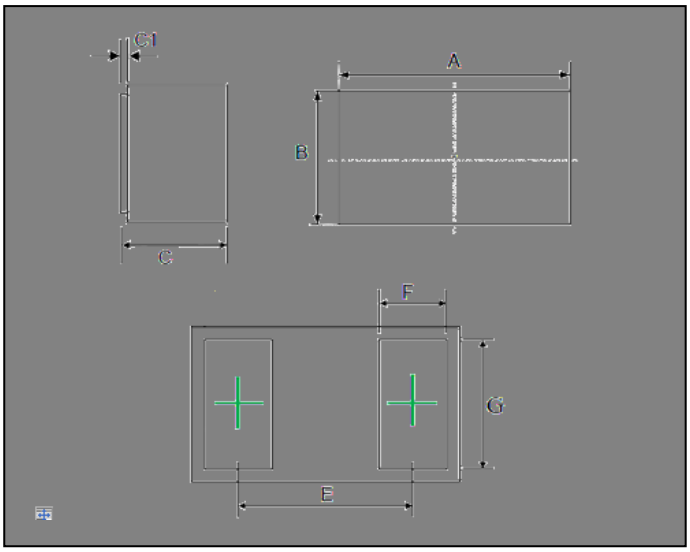
ESD clamping
(-8kV contact discharge per IEC61000-4-2)



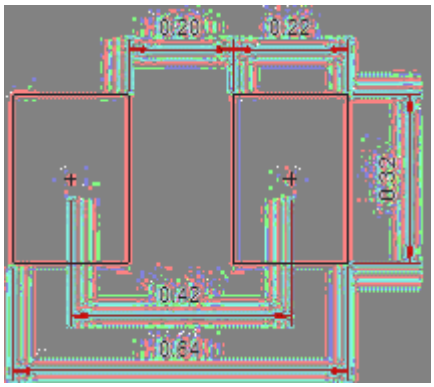
TLP Measurement



■ Outline Dimensions



■ 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