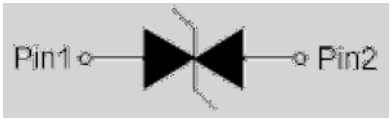
1-Line, Bi-directional, Transient Voltage Suppressor



Features

- Stand-off voltage: ±5.5V 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): 10A (8/20μs)
- Low leakage current
- Ultra-low c
- Low clamping voltage:

VCL =8.6V typ. @ IPP = 16A (TLP)

- RoHS Compliant
- Solid-state silicon technology

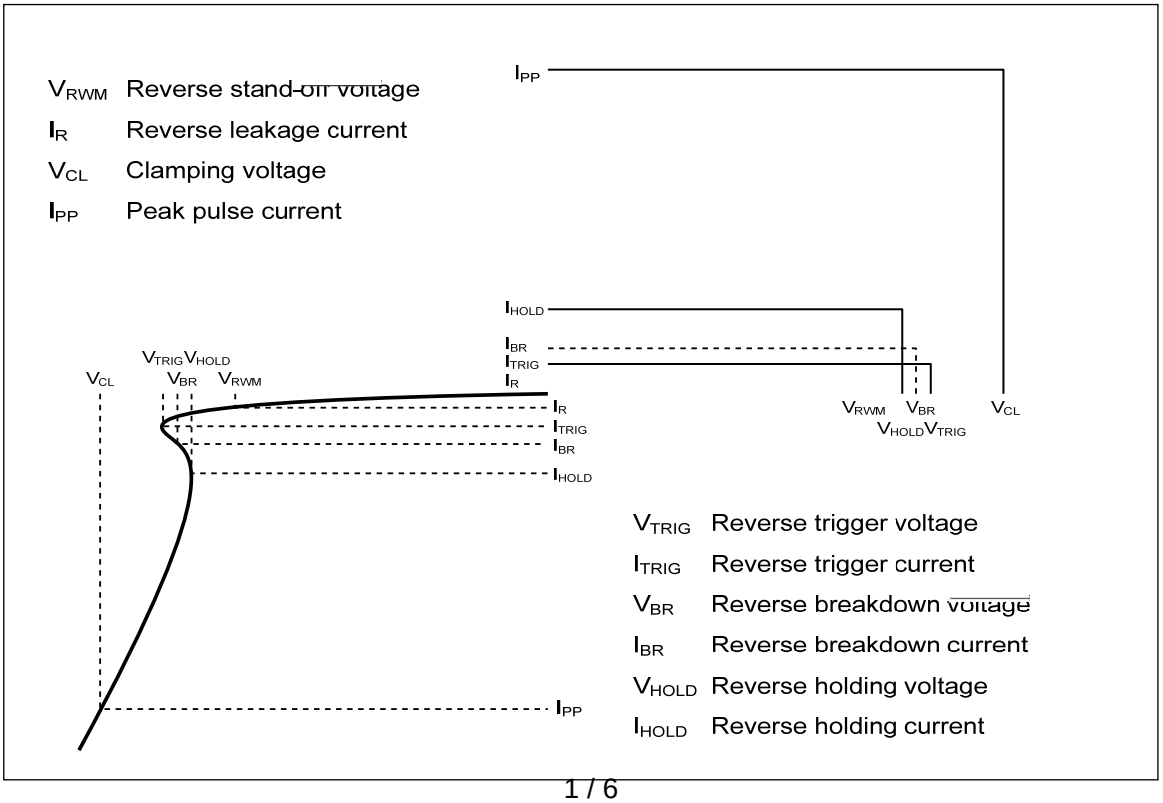
Applications

- Cellular handsets
- Tablets
- Laptops
- Other portable devices
- Network communication devices

Mechanical Data

- Package: DFN0603-2L
- Case Material: “Green” Molding Compound
- Moisture Sensitivity: Level 3 per J-STD-020
- Marking Information: See Below

■Definitions of electrical characteristics



■Maximum Ratings

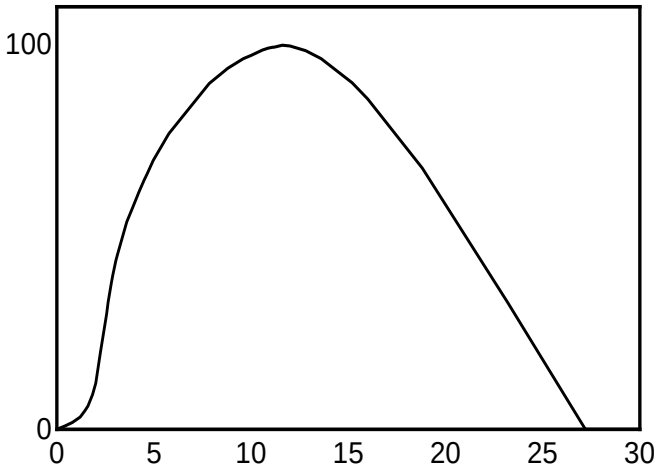
PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power (t_p = 8/20μs)	P_{pk}	140	W
Peak pulse current (t_p = 8/20μs)	I_{PP}	10	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	
Junction temperature	T_J	-45~125	°C
Storage temperature	T_{STG}	-55~150	°C

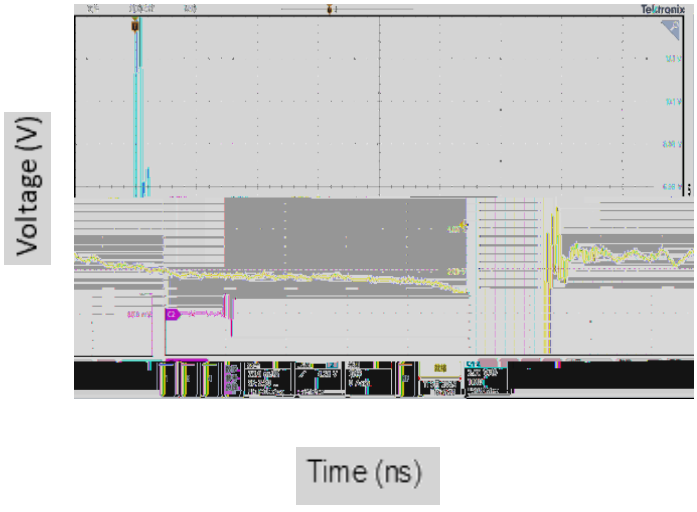
■Electrical Characteristics T_a=25 Unless otherwise specified

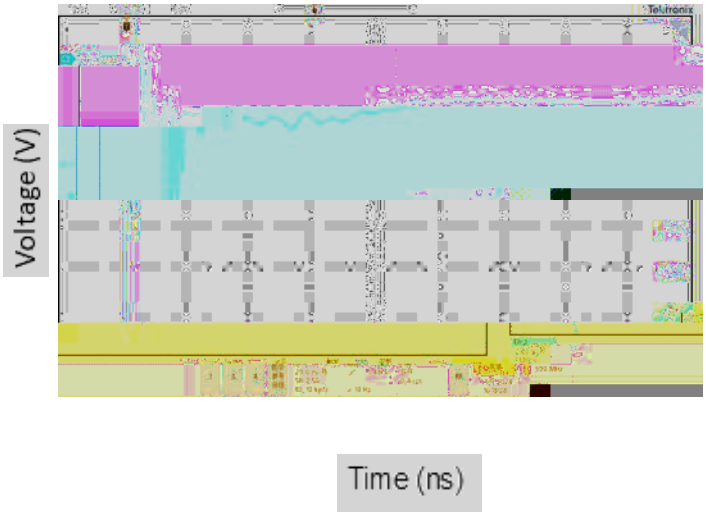
PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				± 5.5
Reverse leakage current	I_R	uA	V_{RWM} = 5.5V			0.1
Reverse breakdown voltage	V_{BR}	V	I_{BR} = 1mA	6.8	7.3	
Clamping voltage *1)*	V_{CL}	V	I_{PP} = 16A, t_p = 100ns(TLP)			
Dynamic resistance *1)*	R_{DYN}	Ω				

■ Characteristics (Typical)

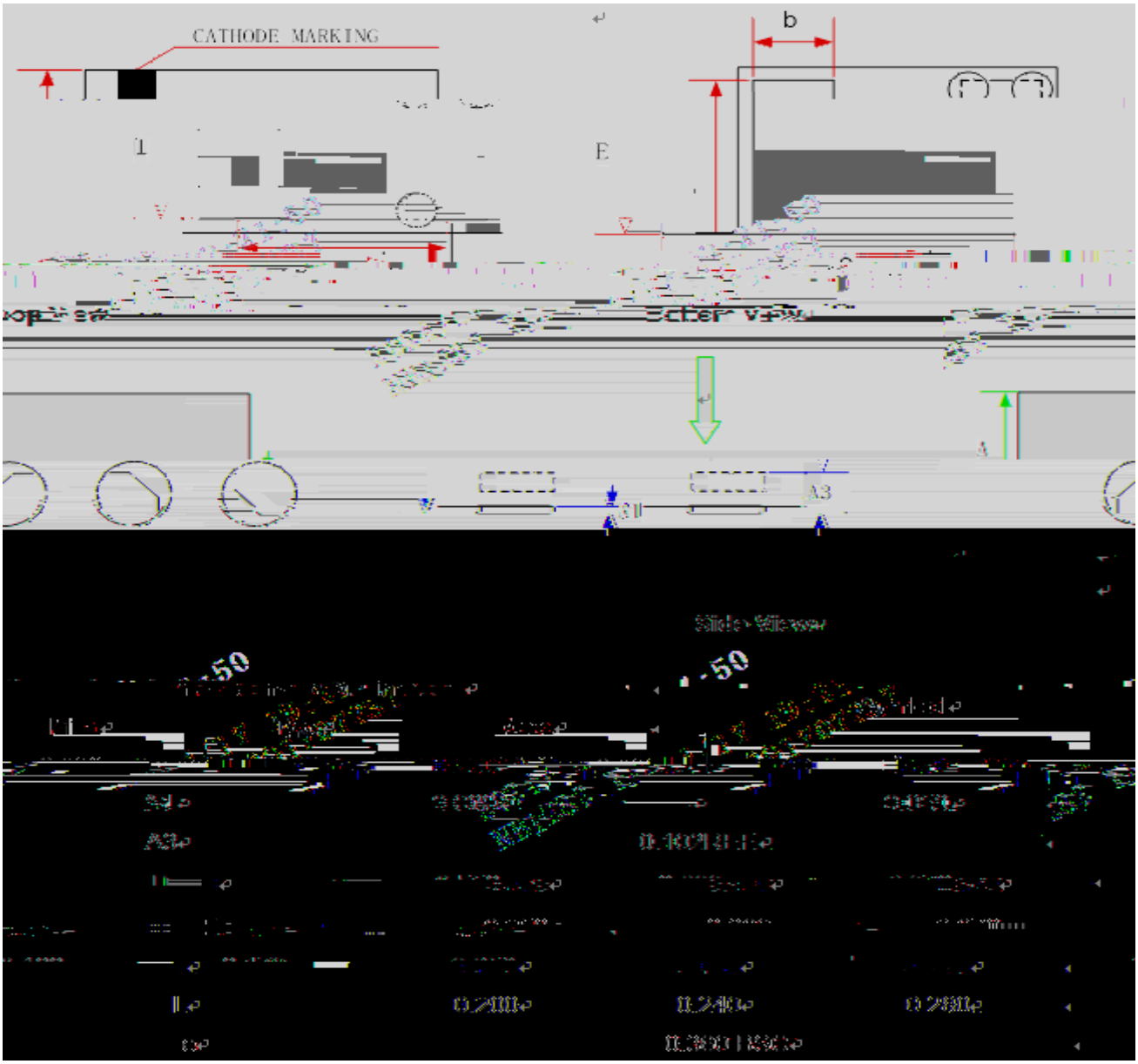
Fig.1 8/20μs wavefor



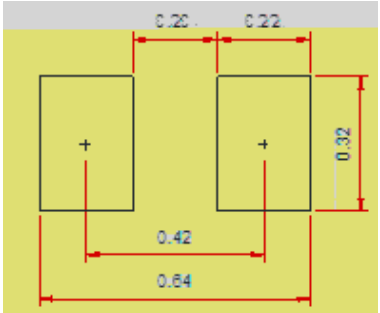

Voltage (V)
Time (ns)


Voltage (V)
Time (ns)

■ Outline Dimensions



■ Recommended PCB Layout



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