



ESD5V5LZBA

1-Line, Bi-directional, Transient Voltage Suppressor



Features

- Stand-off voltage: $\pm 5.5V$ 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): 10A (8/20 μs)
- Low leakage current
- Ultra-low capacitance: $C_J = 25pF$ typ.
- Low clamping voltage:
 - $V_{CL} = 8.6V$ typ. @ $I_{PP} = 16A$ (TLP)
- RoHS Compliant
- Solid-state silicon technology

Applications

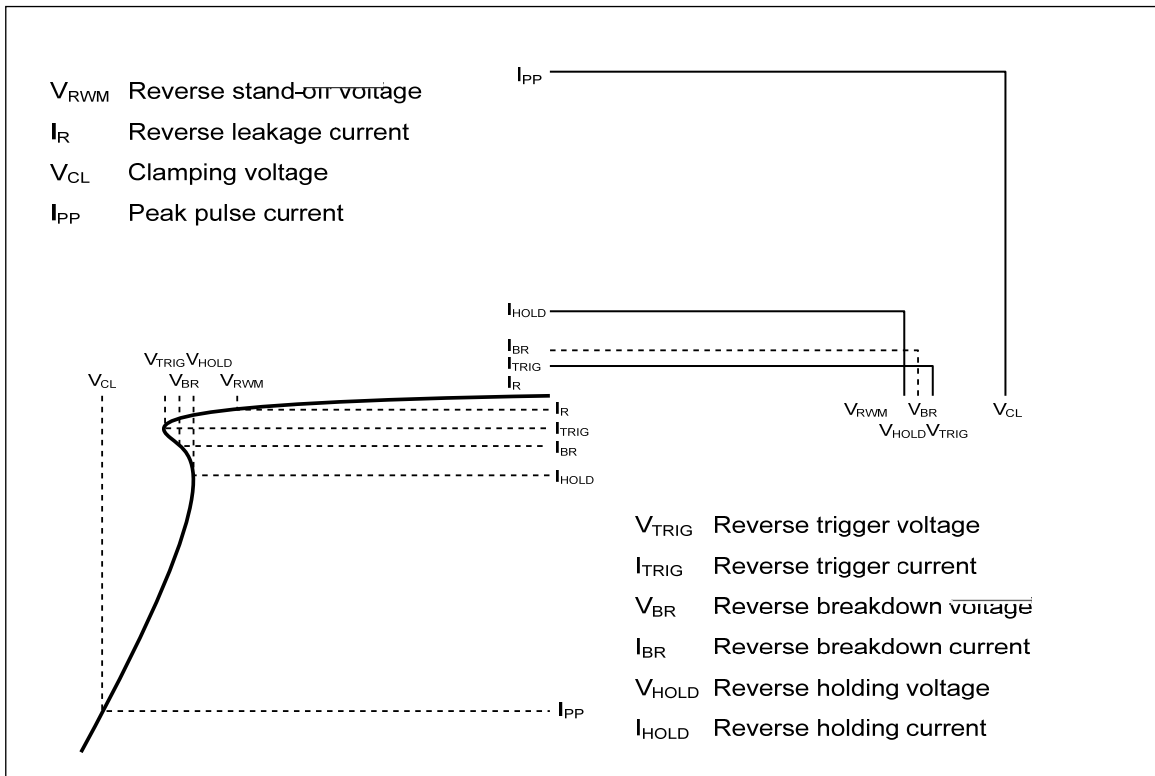
- Cellular handsets
- Tablets
- Laptops
- Other portable devices
- Network communication devices

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





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Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	140	W
Peak pulse current ($t_p = 8/20\mu s$)	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	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

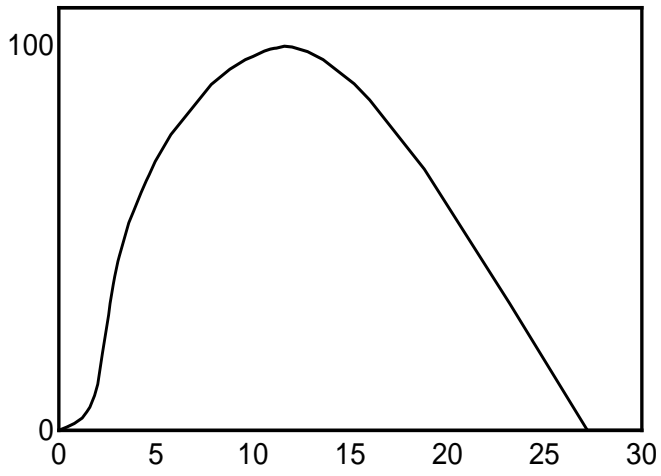
Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				± 5.5
Reverse leakage current	I_R	μA	$V_{RWM} = 5.5V$			0.1
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	6.8	7.3	
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 16A, t_p = 100ns(TLP)$		8.6	
Dynamic resistance ¹⁾	R_{DYN}				0.17	



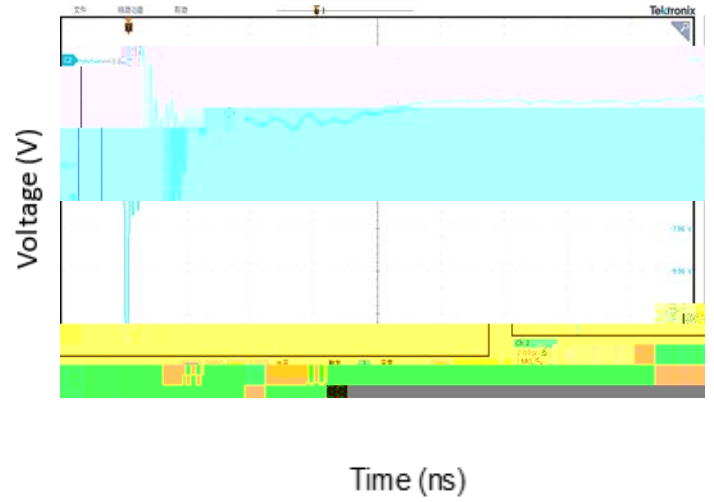
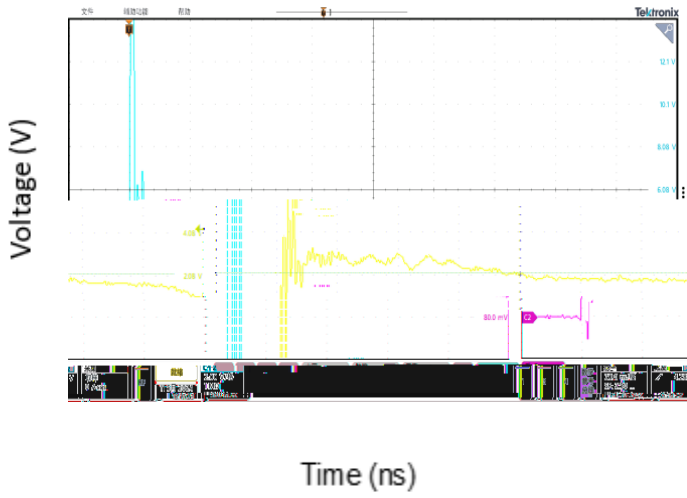
Characteristics (Typical)

Fig.1 8/20 μ s wavefor



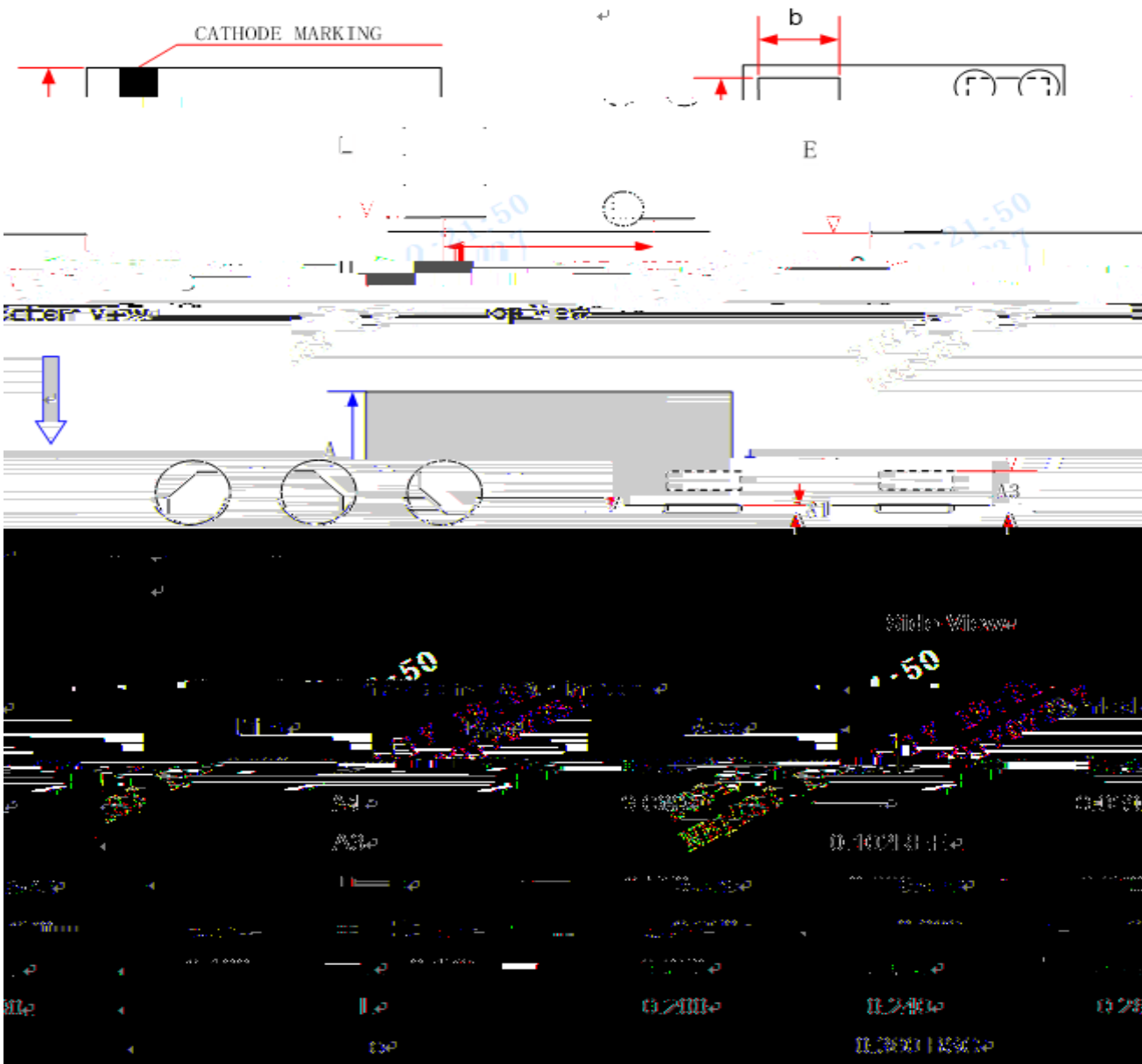


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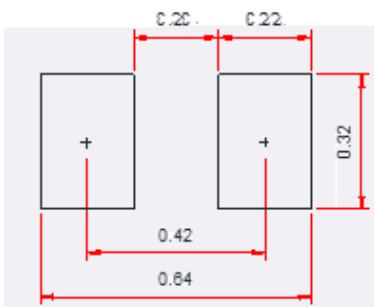




Outline Dimensions



Recommended PCB Layout





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