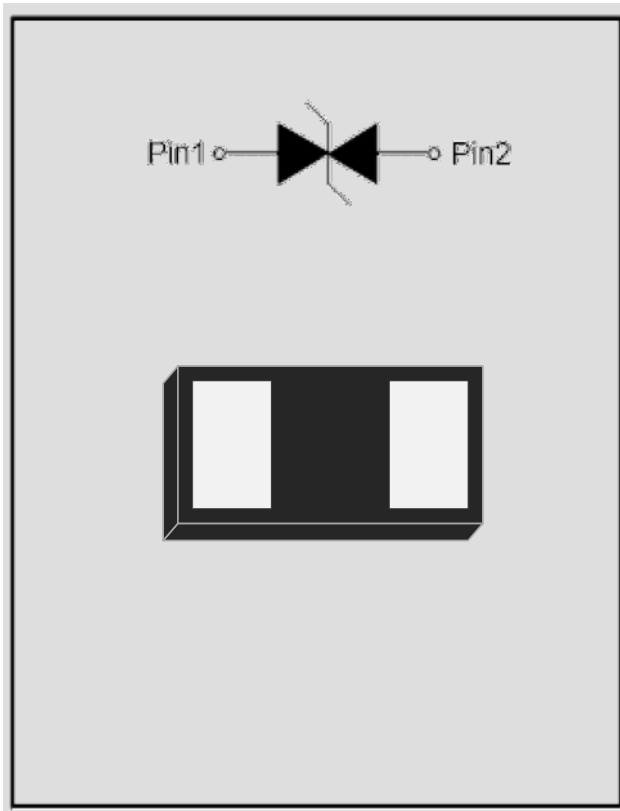


1-Line, Bi-directional, Transient Voltage Suppressor



Features

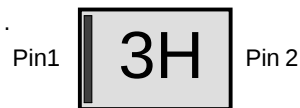
- ✕ Stand-off voltage: $\pm 3.3V$ Max
- ✕ Transient protection for each line according to
 - IEC61000-4-2(ESD): $\phi 30kV$ (contact)
 - IEC61000-4-4 (EFT): 40A (5/50ns)
 - IEC61000-4-5(surge): 13A (8/20 μ s)
- ✕ Low leakage current
- ✕ Ultra-low capacitance: $C_J = 20pF$ typ
- ✕ Low clamping voltage:
 $V_{CL} = 7.2V$ typ. @ $I_{PP} = 16A$ (TLP)
- ✕ RoHS Compliant

Applications

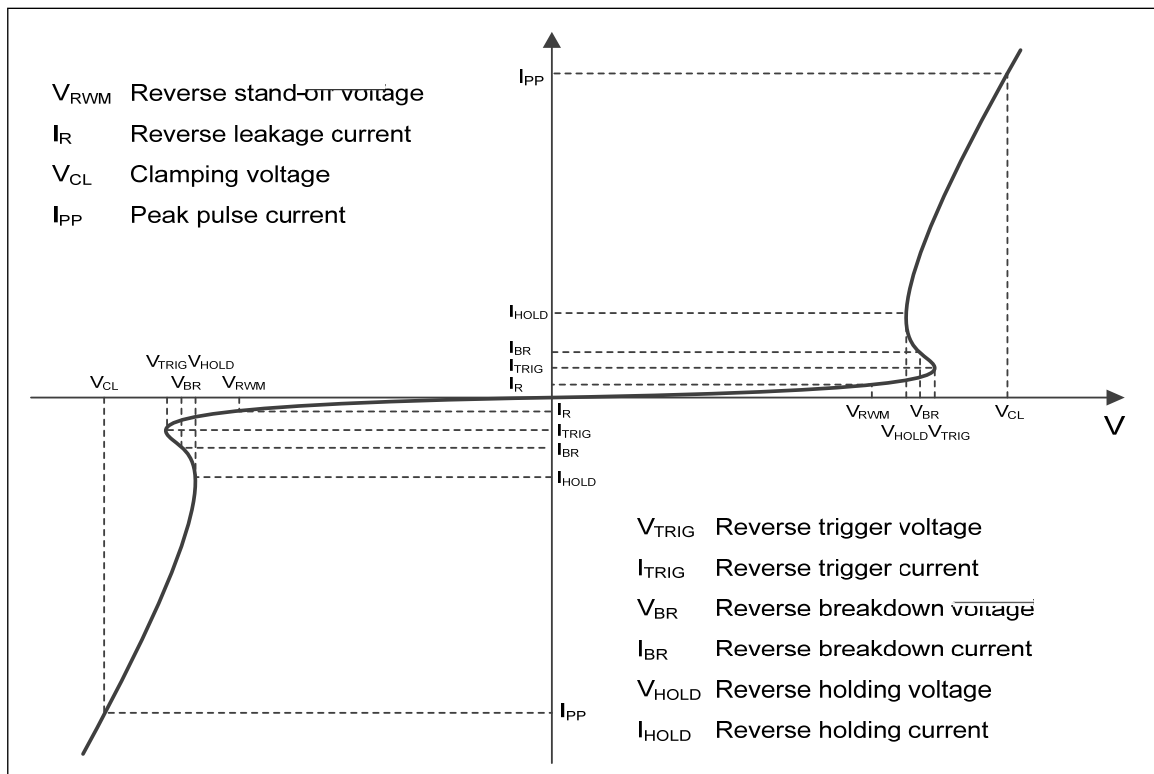
- ✕ Cellular Handsets
- ✕ Tablets
- ✕ Laptops
- ✕ Other portable devices
- ✕ Network communication devices

Mechanical Data

- ✕ Package: DFN1006-2L
- ✕ Case Material: ϕ Green ϕ Molding Compound
- ✕ Moisture Sensitivity: Level 3 per J-STD-020
- ✕ Marking Information: See Below



Definitions of electrical characteristics





ESD3V3LBA3

Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	120	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	13	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				3.3
Reverse leakage current	I_R	μA	$V_{RWM} = 3.3V$			0.1
Reverse breakdown voltage	V_{BR}	V	$I_{BR} = 1mA$	3.5	4	
Clamping voltage ¹⁾	V_{CL}	V	$I_{PP} = 16A, t_p = 0.2/100ns(TLP)$		7.2	
Dynamic resistance ¹⁾	R_{DYN}	=			0.17	
²⁾		V			7.5	
Clamping voltage ¹⁾	V_{CL}	V			4.5	5.5
		V			7.2	9
Junction capacitance	C_J	pF			20	28
Junction capacitance	C_J	pF			18	22

Notes:

(1). Non-repetitive current pulse, according to IEC61000-4-5.

Notes:

- 1) TLP parameter: $Z_0 = 50\Omega$, $t_p = 100ns$, $t_r = 2ns$, averaging window from 60ns to 80ns. R_{DYN} is calculated from 4A to 16A.
- 2) Contact discharge mode, according to IEC61000-4-2.
- 3) Non-repetitive current pulse, according to IEC61000-4-5.

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD3V3LBA3	F1	Approximate 0.9	10000	100000	400000	70 reel



Ω Characteristics (Typical)

Fig.1 8/20μs waveform per IEC61000-4-5

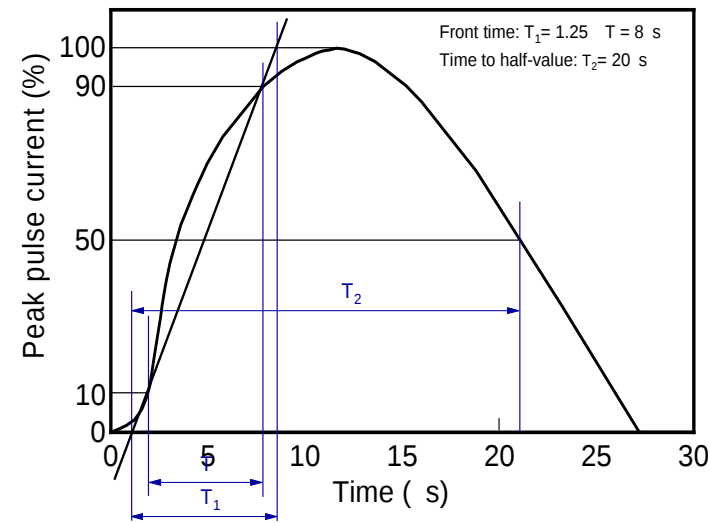
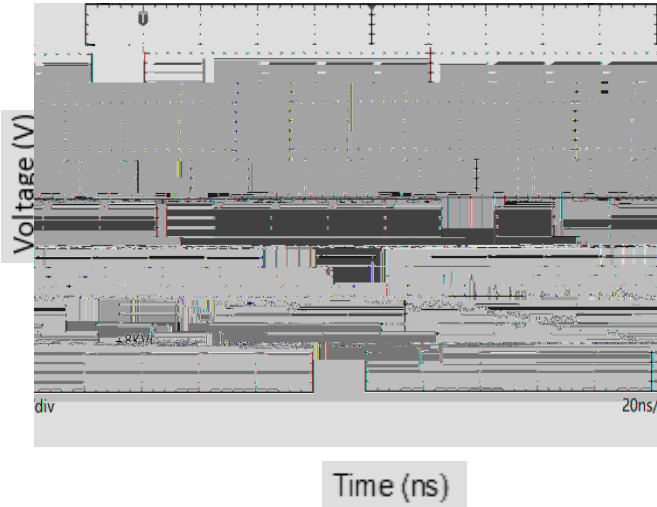
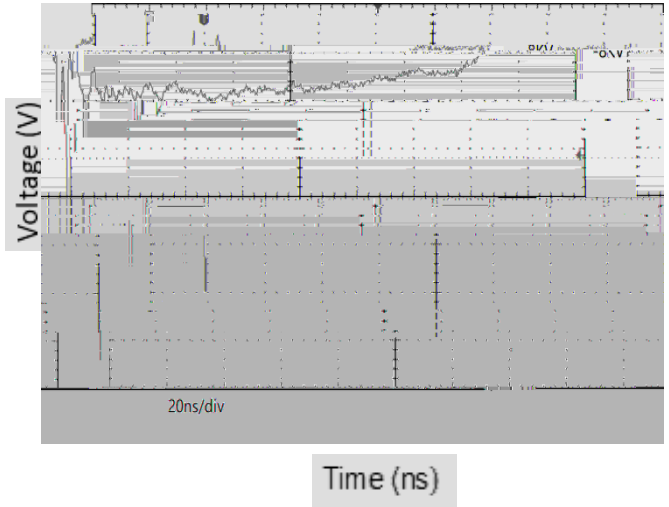


Fig.7 ESD clamping

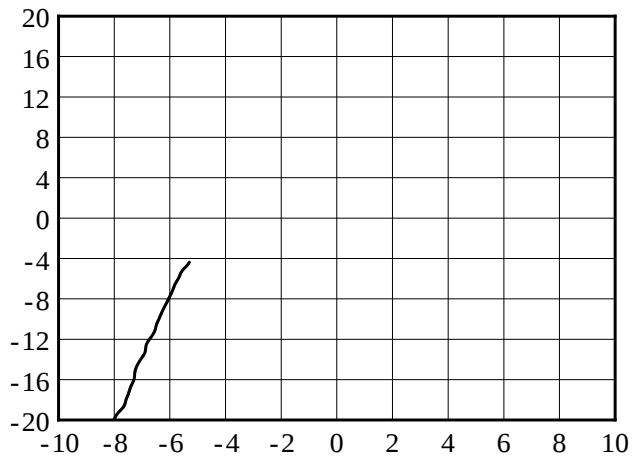


(+8kV contact discharge per IEC61000-4-2)

Fig.8 ESD clamping t



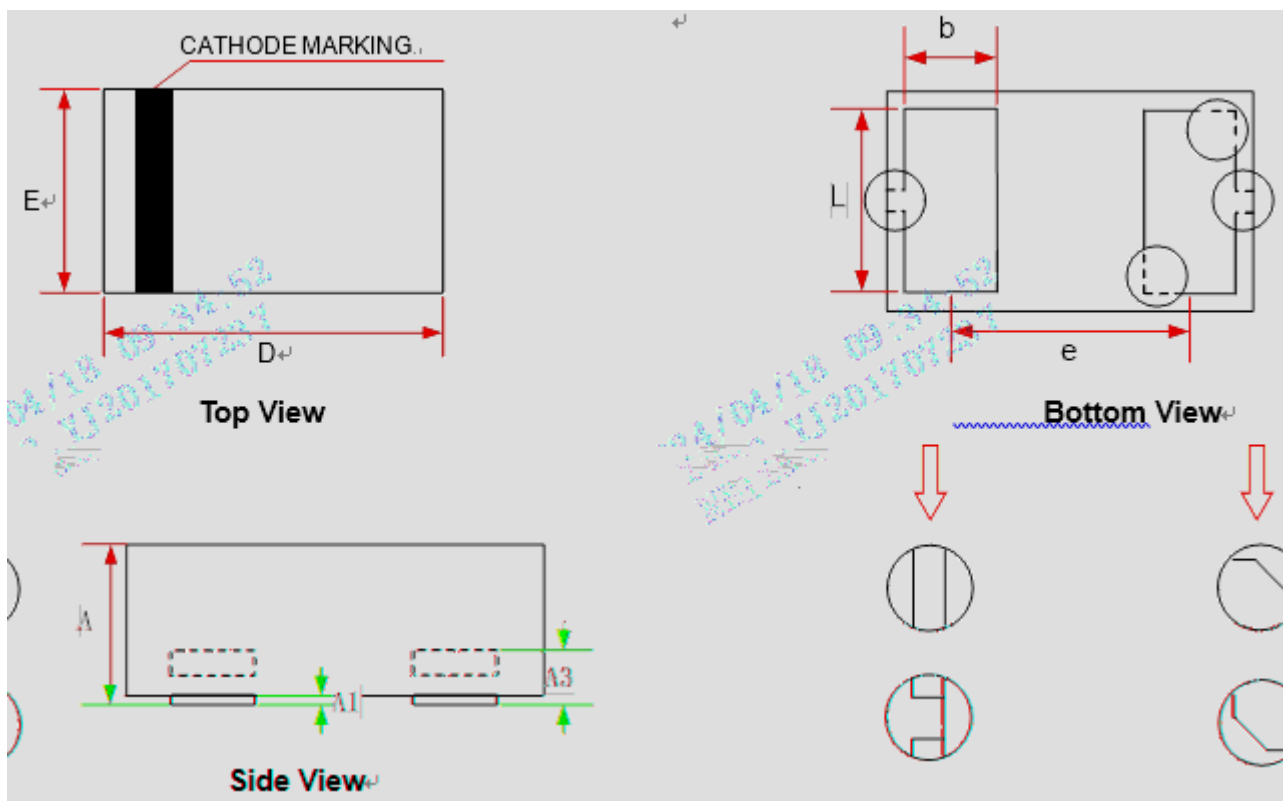
(-8kV contact discharge per IEC61000-4-2)



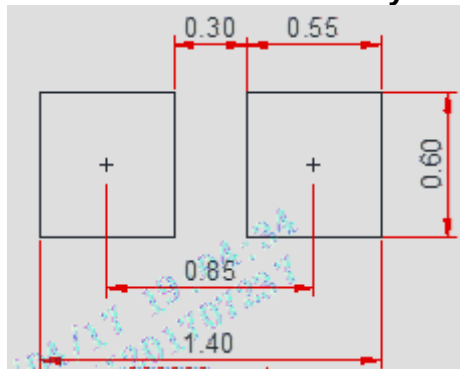


ESD3V3LBA3

Ω Outline Dimensions



■ Recommended PCB Layout





Disclaimer

The information presented o "