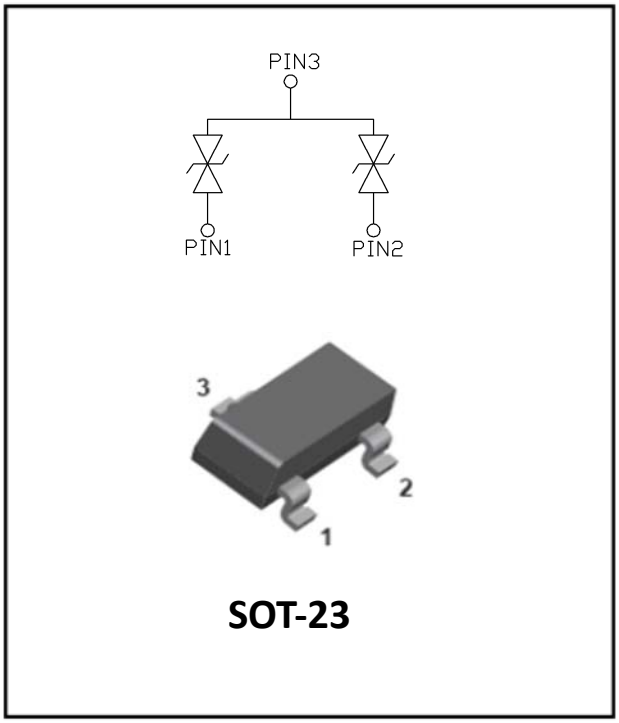
2-Line, Bi-directional, Transient Voltage Suppressor



Features

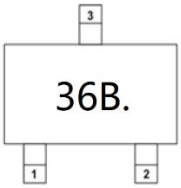
- Stand-off voltage: ±36V Max
- Transient protection for each line according to
  IEC61000-4-2(ESD): ±30kV (contact)
  IEC61000-4-5(surge): 5A (8/20μs)
- Low leakage current:
- Ultra low clamping voltage
- RoHS Compliant

Applications

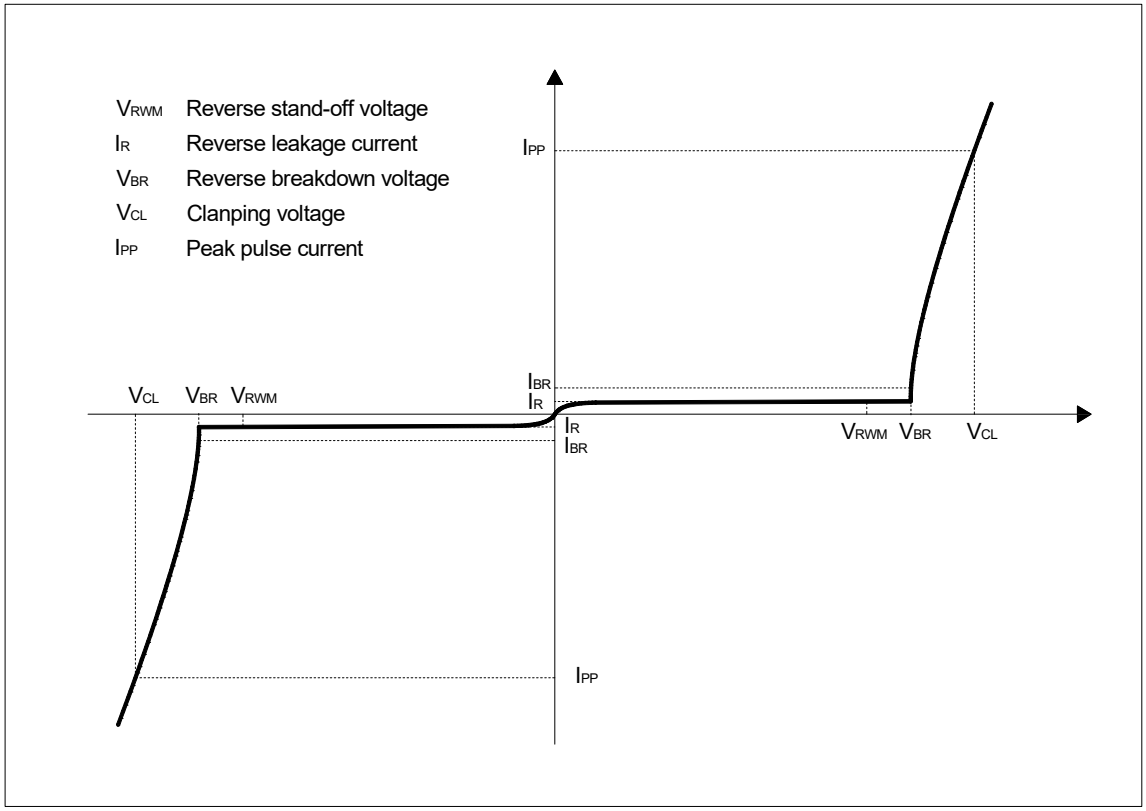
- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Portable Instrumentation
- Set Top Box
- Industrial Controls
- Server and Desktop PC

Mechanical Data

- Package: SOT-23
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound
- Moisture Sensitivity: Level 1 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}	375	W
Peak pulse current (t_p = 8/20μs)	I_{PP}	5	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	125	ºC
Storage temperature	T_{STG}	-55~150	ºC

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V				±36
Reverse leakage current	I_R	μA	V_{RWM} = 36V			0.5
Reverse breakdown voltage	V_{BR}	V	I_T = 1mA	39.6		49
Clamping voltage [1)]	V_{CL}	V	I_{PP} = 1A, t_p = 8/20μs			58
		V	I_{PP} = 5A, t_p = 8/20μs			75
Junction capacitance	C_J	pF	V_R = 0V, f = 1MHz		13	

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

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ESD3602EB	F2	Approximate 8	3000	30000	120000	7” reel

■ Characteristics (Typical)

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

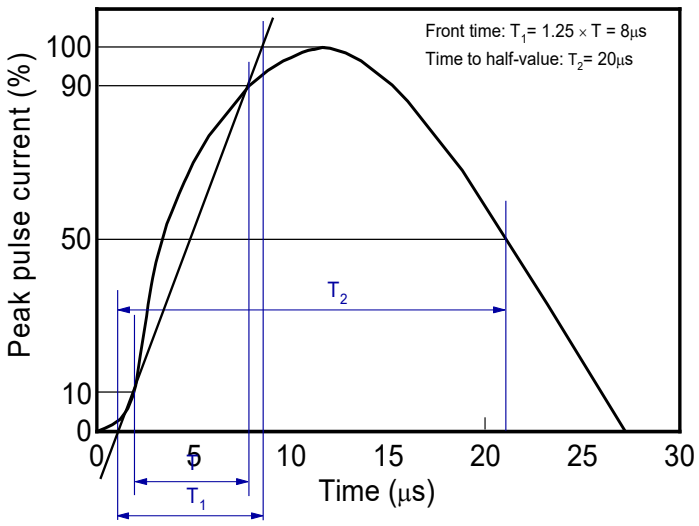


Fig.2 Contact discharge current waveform per IEC61000-4-2

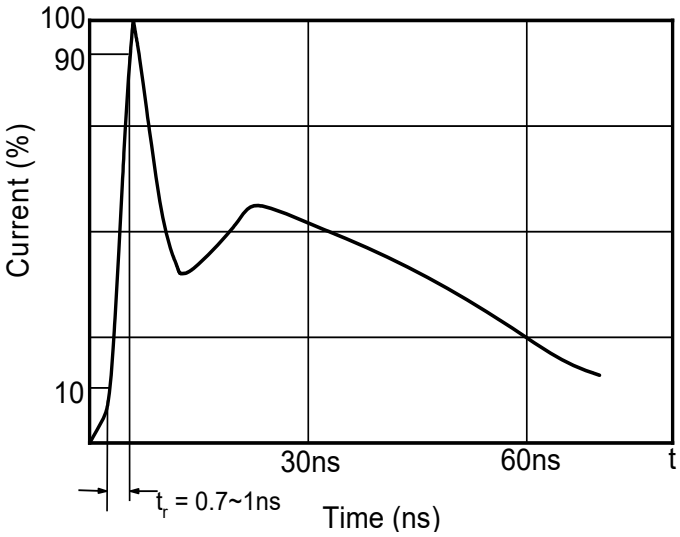


Fig.3 Clamping voltage vs. Peak pulse current

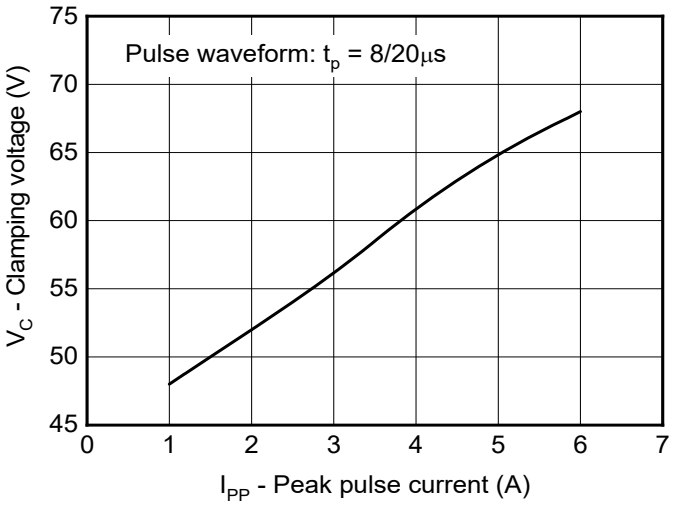


Fig.4 Capacitance vs. Reverse voltage

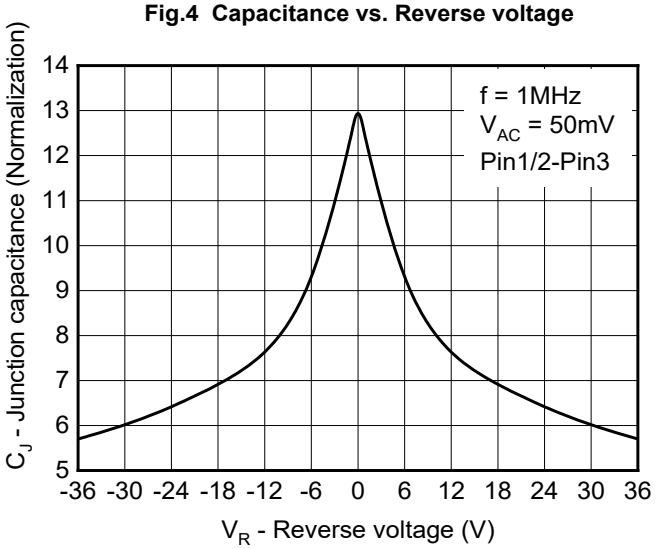


Fig.5 Non-repetitive peak pulse power vs. Pulse time

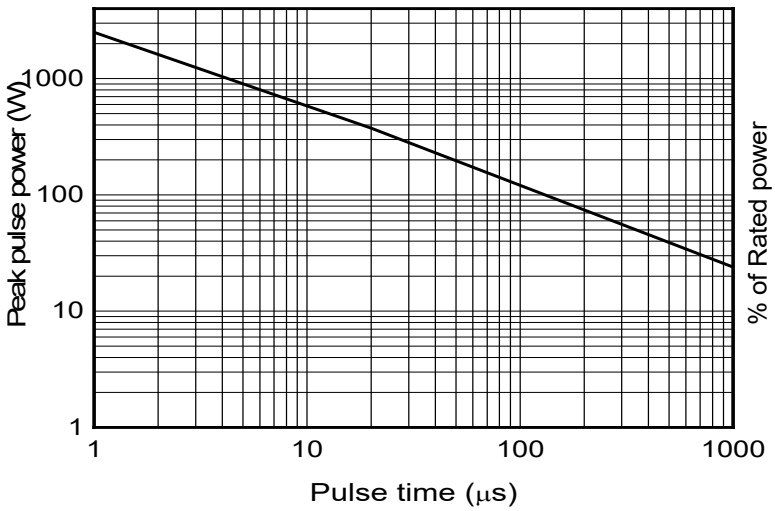


Fig.6 Power derating vs. Ambient temperature

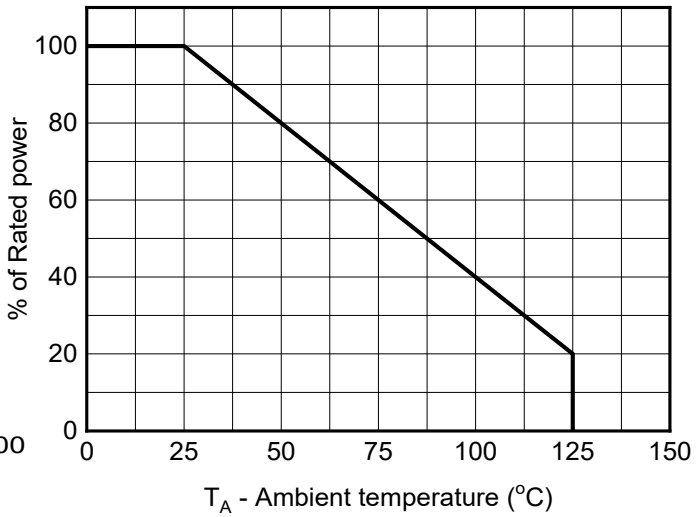
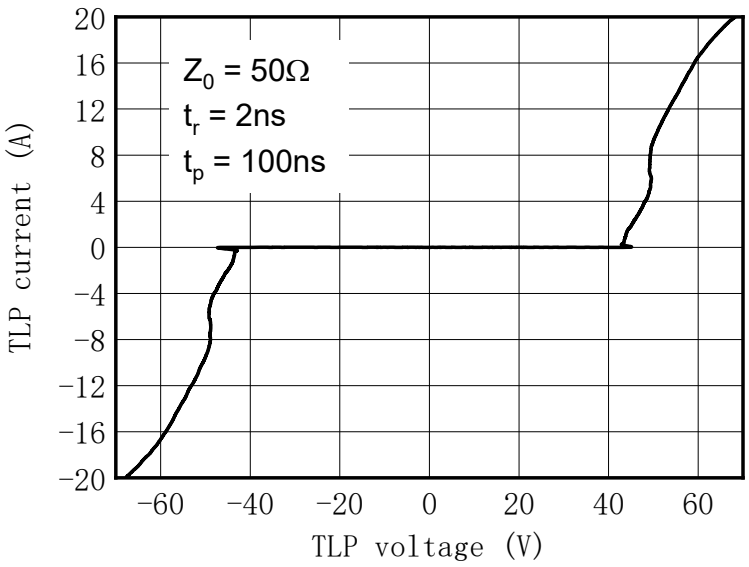
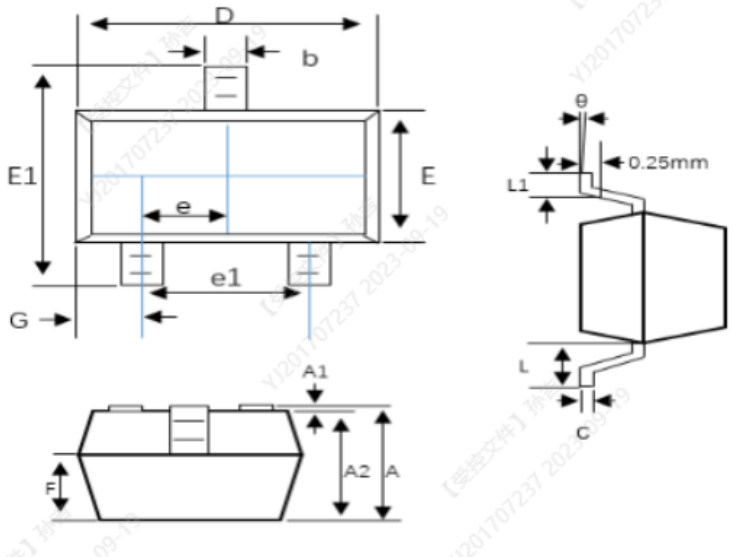


Fig.9 TLP Measurment

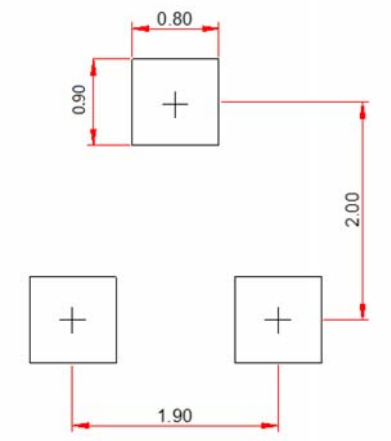


■ Outline Dimensions



DIM	SOT-23-3L		
	Millimeters		
	Min	Typ	Max
A	0.945	1.035	1.125
A1	0.005	0.06	0.1
A2	0.925	0.975	1.025
b	0.34	0.4	0.49
c	0.1	0.15	0.2
D	2.875	2.9	2.925
E	1.295	1.32	1.345
E1	2.3	2.4	2.5
e	0.925	0.95	0.975
e1	1.85	1.9	1.95
G	0.45	0.5	0.55
F	0.55	0.575	0.6
L1	0.3	0.4	0.5
L	0.45	0.55	0.65
θ	0°	4°	8°

■ Soldering Footprint



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