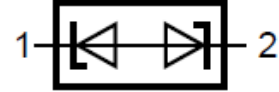


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 30 kV (air), ± 30 kV (contact)
- Max. peak pulse power: $P_{PP} = 160W$ at $t_p = 8/20\mu s$
- Low clamping voltage: $V_{CL} = 40V$ at $I_{PP} = 1A$
- ESD protection of up to 23 kV

HF



SOD-123

Mechanical Data

- Case: SOD-123
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
GESD1524VB1	SOD-123	3000pcs / Tape & Reel	AM

Maximum Ratings (@ $T_A = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
IEC 61000-4-2; ESD (Air)	V_{ESD-A}	± 30	kV
IEC 61000-4-2; ESD (Contact)	V_{ESD-C}	± 30	kV
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	160	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	3	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature Range	T_{STG}	-40 ~ +150	$^\circ C$

Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Stand-off Voltage	V_{RWM}	Pin1 to Pin2 Pin2 to Pin1	-	-	15 24	V
Reverse Breakdown Voltage	$V_{(BR)}$	Pin1 to Pin2 @ $I_T = 1\text{mA}$ Pin2 to Pin1 @ $I_T = 1\text{mA}$	17.1 25.4	- -	20.7 30.7	V
Reverse Leakage Current	I_R	Pin1 to Pin2 @ $V_{RWM} = 15\text{V}$ Pin2 to Pin1 @ $V_{RWM} = 24\text{V}$	- -	- -	1 1	μA
Clamping Voltage	V_C	Pin1 to Pin2 @ $I_{PP} = 1\text{A}$	-	-	30	V
		Pin1 to Pin2 @ $I_{PP} = 5\text{A}$	-	-	40	V
		Pin2 to Pin1 @ $I_{PP} = 1\text{A}$	-	-	45	V
		Pin2 to Pin1 @ $I_{PP} = 3\text{A}$	-	-	55	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	-	-	17	pF

Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

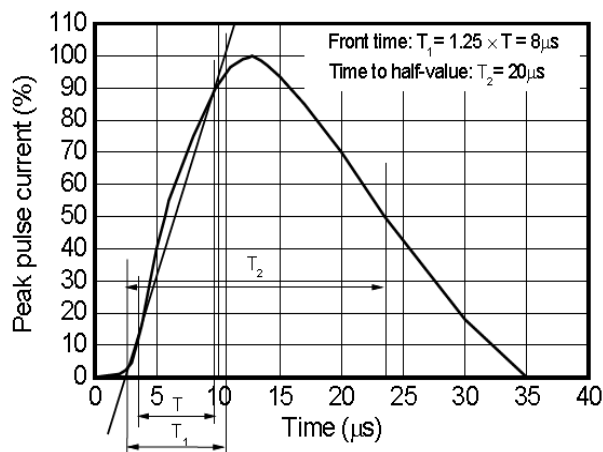


Fig 1 8/20 μs waveform per IEC61000-4-5

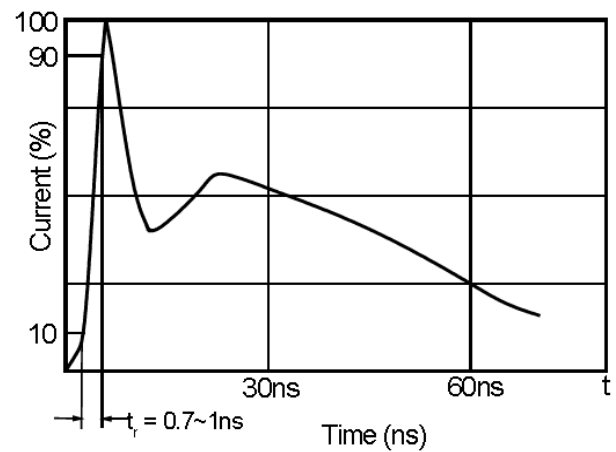
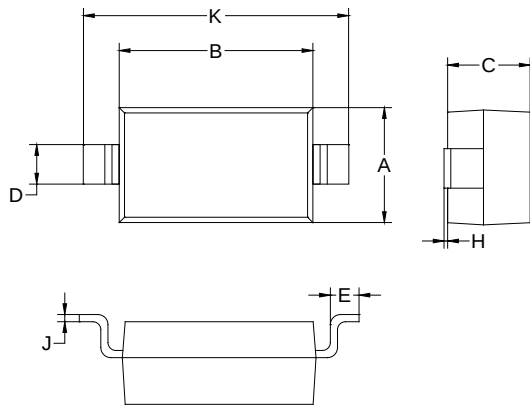


Fig 2 ESD pulse waveform according to IEC61000-4-2

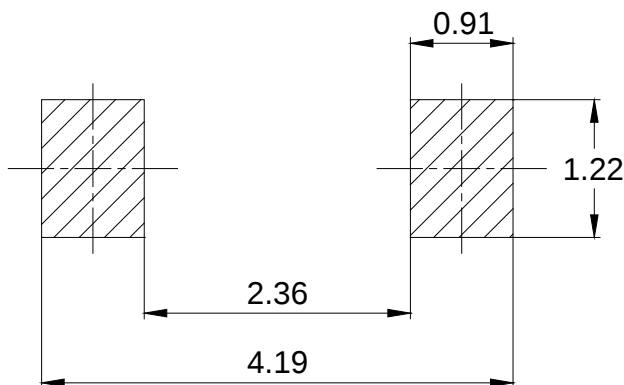
Package Outline Dimensions (Unit: mm)



SOD-123		
Dimension	Min.	Max.
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

Package Outline Dimensions (Unit: mm)

SOD-123



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