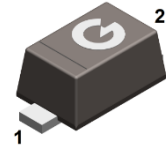


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 30 kV (air), ± 30 kV (contact)
- Working voltage: $V_{RWM} = 6.2V$

HF



SOD-523

Mechanical Data

- Case: SOD-523
- 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
GESD6V2D5	SOD-523	3000 pcs / Tape & Reel	6V2

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8 / 20\mu s$)	P_{PP}	150	W
Reverse Working Voltage	V_{RWM}	6.2	V
ESD According to IEC61000-4-2 Air	V_{ESD}	± 30	kV
ESD According to IEC61000-4-2 Contact Discharge	V_{ESD}	± 30	kV

Thermal Characteristics

Parameter	Symbol	Value	Unit
Operating Junction Temperature Range	T_J	$-55 \sim +150$	$^\circ C$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^\circ C$

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

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	6.3	-	7.8	V
I_R	Reverse Leakage Current	$V_{RWM} = 6.2V$	-	-	1000	nA
V_C	Clamping Voltage	$I_{PP} = 1A, t_p = 8/20\mu s$	-	-	8.5	V
		$I_{PP} = 10A, t_p = 8/20\mu s$	-	-	15	V
C_J	Junction Capacitance	$V_R = 0V, f = 1.0MHz$	-	-	120	pF

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

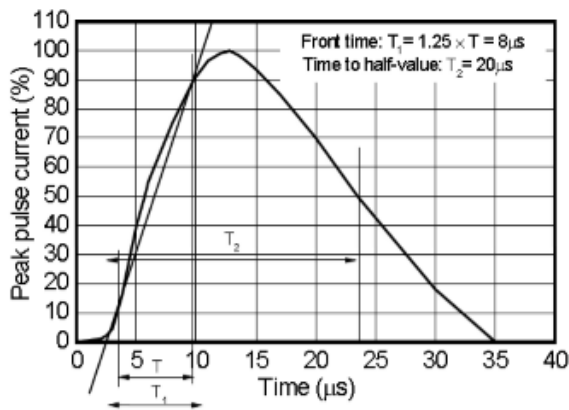


Fig 1 8/20 μs waveform per IEC61000-4-5

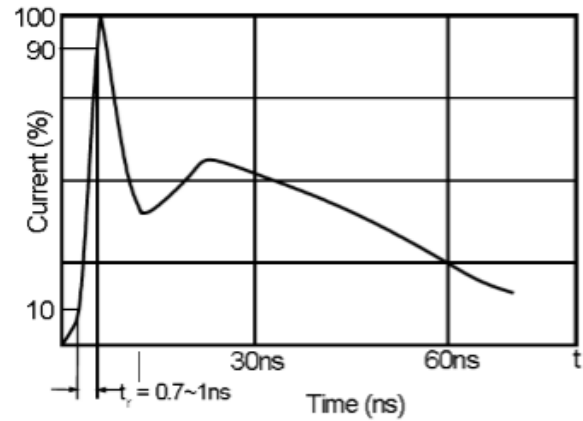


Fig 2 ESD pulse waveform according to IEC61000-4-2

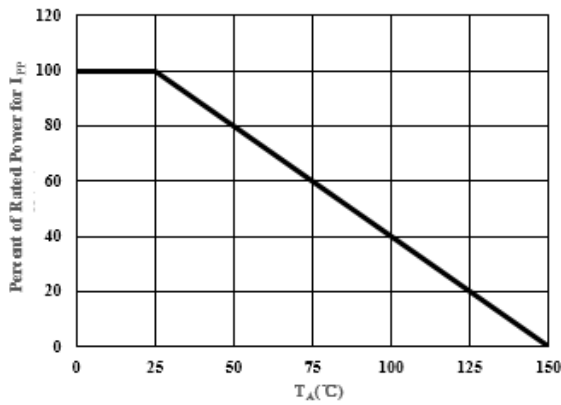
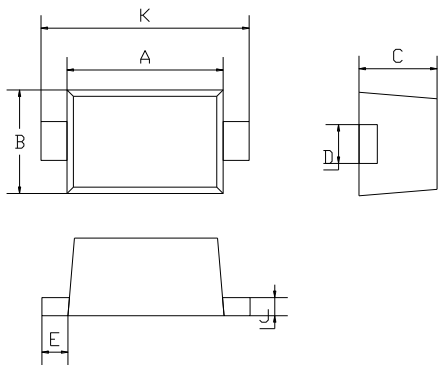


Fig 3 Power Derating Curve

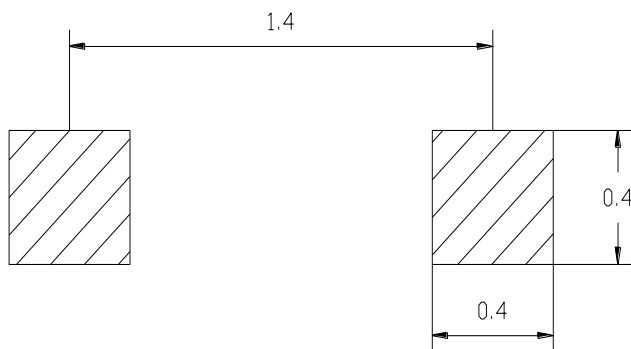
Package Outline Dimensions (Unit: mm)



SOD-523		
Dimension	Min.	Max.
A	1.10	1.30
B	0.70	0.90
C	0.50	0.70
D	0.25	0.35
E	0.15	0.25
J	0.05	0.15
K	1.50	1.70

Package Outline Dimensions (Unit: mm)

SOD-523



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