

### Features

- Transient protection for data& power lines to IEC 61000-4-2(ESD)30Kv(air),30kV(contanct)
- Working Voltage: 3.3V.
- Low clamping voltage.
- Low leakage current.

HF

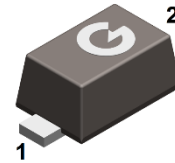


### Typical Applications

- Power lines.
- Cellular handsets.
- Tablets.
- Microprocessors.
- Portable Electronics.

### Mechanical Data

- Case: SOD-523.
- Molding compound, UL flammability classification rating 94V-0.
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208.



SOD-523

### Ordering Information

Part Number	Package	Shipping	Marking Code
GESD3V3S1B5	SOD-523	3000 pcs / Tape & Reel	RH

### Maximum Ratings (@T<sub>A</sub>=25°C unless otherwise specified)

Characteristic	Symbol	Value	Units
Peak pulse power (tp = 8/20μs)	P <sub>PK</sub>	50	W
Peak pulse current (tp = 8/20μs)	I <sub>PP</sub>	5	A
Reverse Stand-off Voltage	V <sub>RWM</sub>	3.3	V
ESD according to IEC61000-4-2 air discharge	V <sub>ESD</sub>	±30	KV
ESD according to IEC61000-4-2 contact discharge		±30	

### Thermal Characteristics

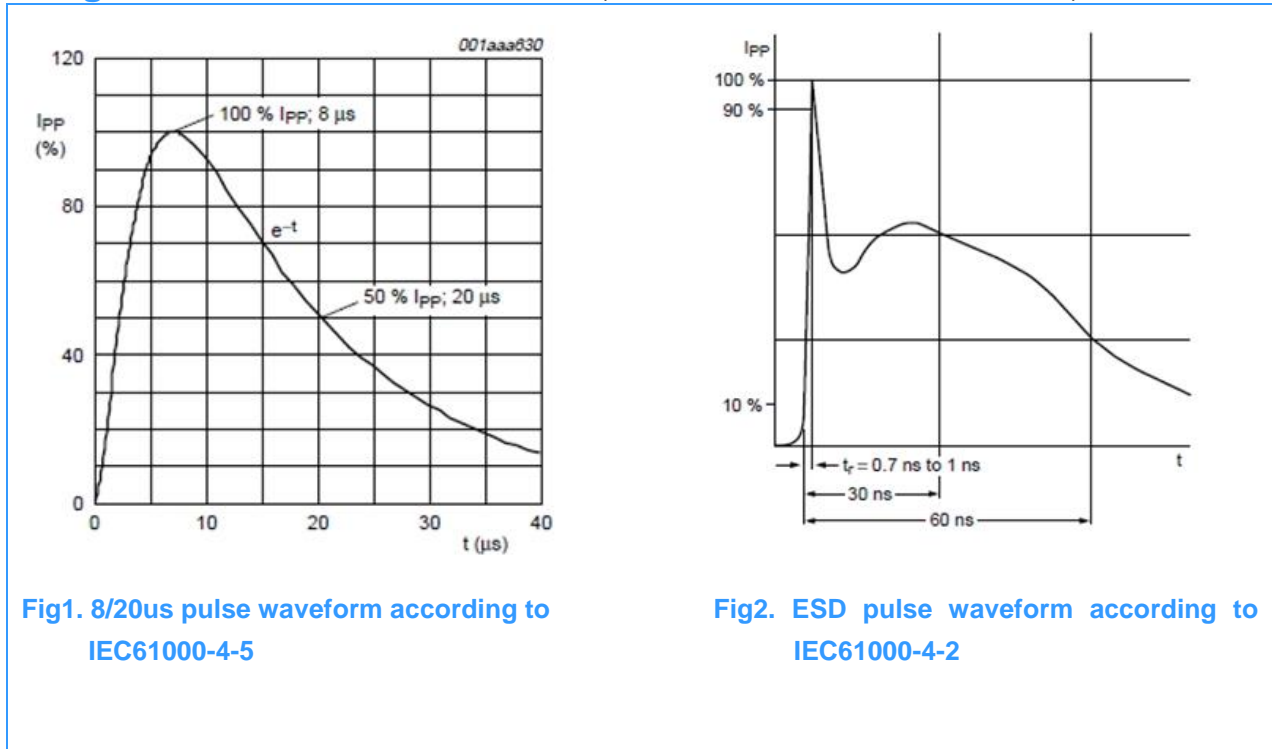
Parameter	Symbol	Value	Units
Junction temperature	T <sub>J</sub>	-55 to+150	°C
Storage temperature range	T <sub>STG</sub>	-55 to+150	°C

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Reverse breakdown voltage	$V_{BR}$	$I_R=1\text{mA}$	3.8	-	6.5	V
Reverse leakage current <sup>(Note1)</sup>	$I_R$	$V_{RWM}=3.3\text{V}$	-	-	1	$\mu\text{A}$
Clamping voltage	$V_C$	$I_{PP}=5\text{A}$ , $t_p=8/20\mu\text{s}$	-	7	15	V
Junction capacitance	$C_J$	$V_R=0\text{V}$ , $f=1\text{MHz}$	-	7	13	pF

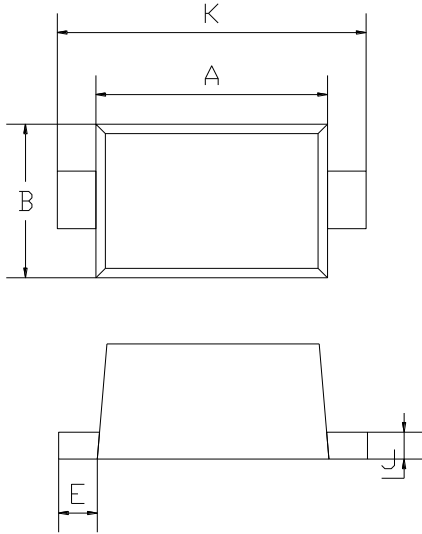
Note1: Short duration pulse test used to minimize self-heating effect.

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



Package Outline Dimensions(unit:mm)

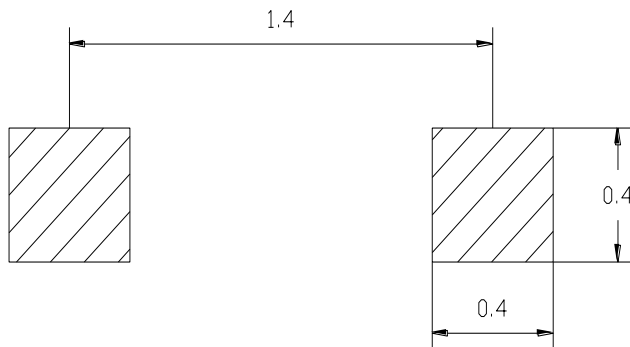
SOD-523



SOD-523		
Dim	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

Mounting Pad Layout(unit:mm)

SOD-523



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