

Features

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

HF



Typical Applications

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



SOD-323

Mechanical Data

- Case: SOD-323
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Tin plated leads, solderable per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
GESD3V3S1B3	SOD-323	3000 pcs / Tape & Reel	RH

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

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

Thermal Characteristics

Parameter	Symbol	Value	Units
Junction temperature	T _J	-55 ~ +150	°C
Storage temperature range	T _{STG}	-55 ~ +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 ^(Note1)	I_R	$V_{RWM}=3.3\text{V}$	-	-	1	μA
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 specified)

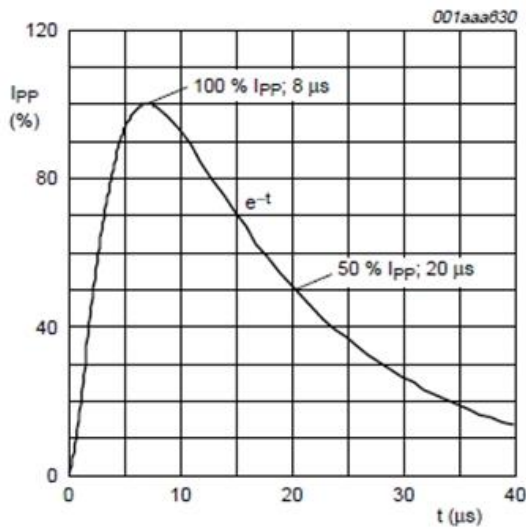


Fig1. 8/20us pulse waveform according to IEC61000-4-5

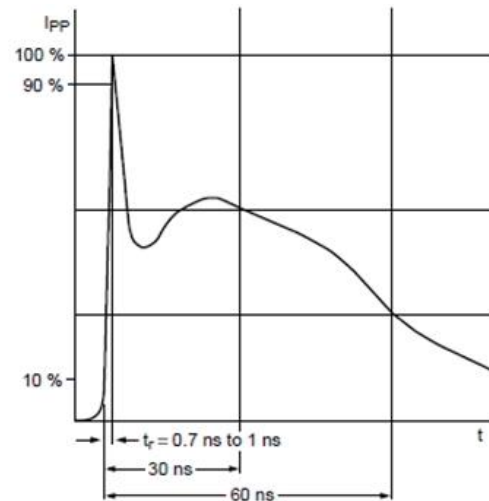
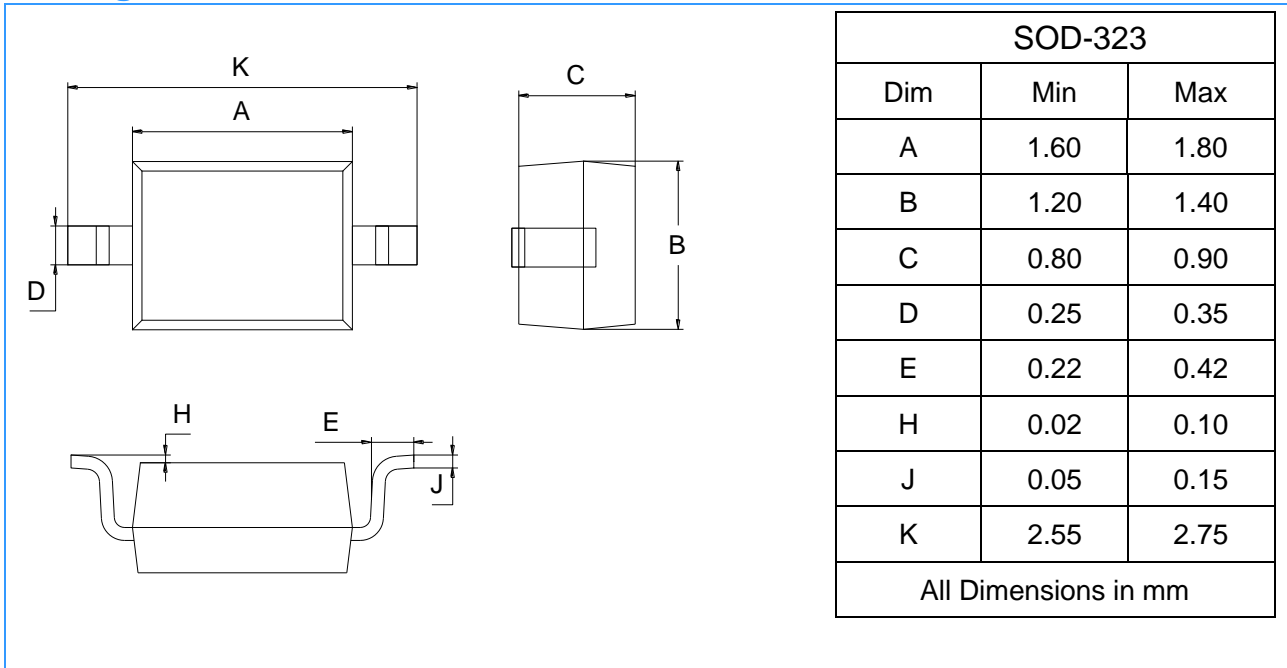
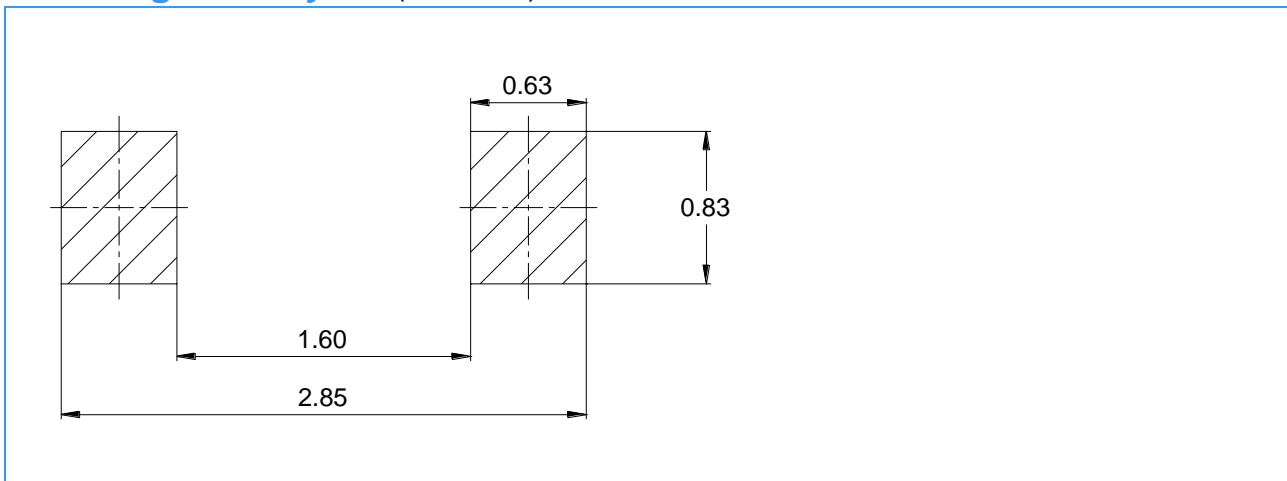


Fig2. ESD pulse waveform according to IEC61000-4-2

Package Outline Dimensions (unit: mm)



Mounting Pad Layout (unit: mm)



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