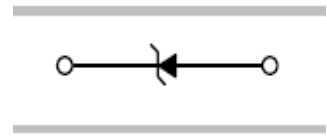


Features

- Transient protection for data&power lines to IEC 61000-4-2(ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC 61000-4-4(EFT) 40A($t_p=5/50\text{ns}$)
- IEC 61000-4-5(Lightning) 6A($t_p=8/20\mu\text{s}$)
- Working Voltage: 36V
- Low clamping voltage
- Low leakage current
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



SOD-323

Typical Applications

- Switches / Buttons
- Test Equipment
- Point-of-Sale Terminals
- Medical Equipment
- Computer Peripherals
- Automotive Electronics

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
TPSD36	SOD-323	3000 pcs / Tape & Reel	g4

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

Characteristic	Symbol	Value	Unit
Peak pulse power ($t_p = 8/20\mu\text{s}$)	P_{PK}	450	W
Peak pulse current ($t_p = 8/20\mu\text{s}$)	I_{PP}	6	A
Reverse Stand-off Voltage	V_{RWM}	36	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	Unit
Junction temperature	T_J	-55 to +125	°C
Storage temperature range	T_{STG}	-55 to +150	°C

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V_{BR}	$I_R=1\text{mA}$	40	-	-	V
Reverse leakage current ^(Note1)	I_R	$V_{RWM}=36\text{V}$	-	-	1	μA
Clamping voltage	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$	-	-	52	V
		$I_{PP}=6\text{A}$, $t_p=8/20\mu\text{s}$	-	-	94	
Junction capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	30	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)

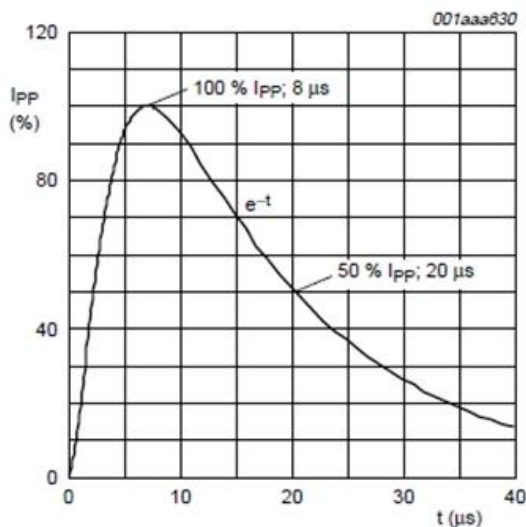


Fig1. 8/20us pulse waveform according to IEC61000-4-5

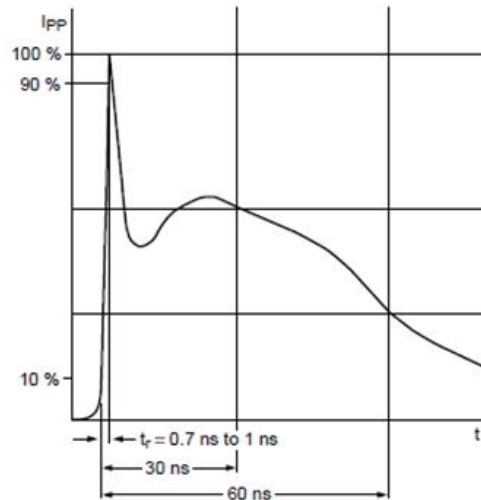
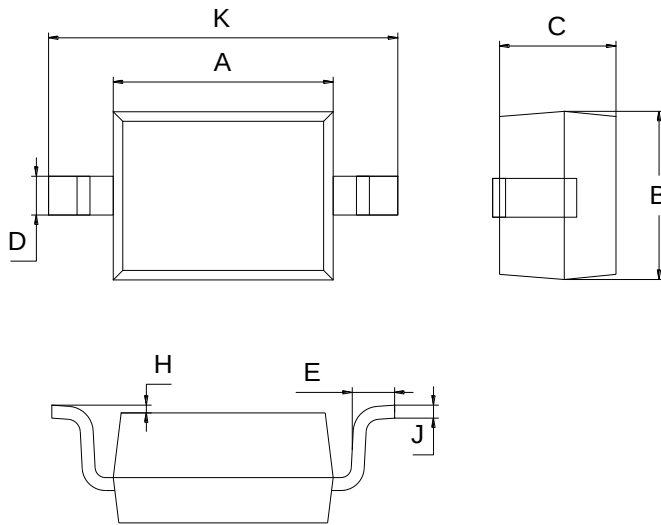


Fig2. ESD pulse waveform according to IEC61000-4-2

Package Outline Dimensions (unit: mm)

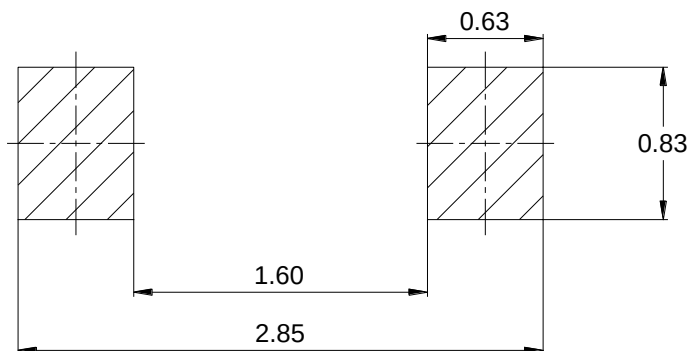
SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (unit: mm)

SOD-323



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