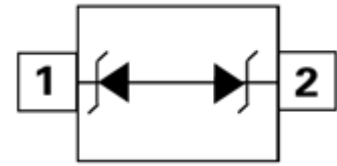


Features

- Transient protection for data&power lines to IEC 61000-4-2(ESD)30Kv(air),30kV(contact)
- Working Voltage: 8V
- Low clamping voltage

HF



Typical Applications

- Laptop Computers
- Cellular Phones
- Digital Cameras
- Personal Digital Assistant

Mechanical Data

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



SOD-323

Ordering Information

Part Number	Package	Shipping	Marking Code
ESD08C	SOD-323	3000 pcs / Tape & Reel	08C

Maximum Ratings

 (@ T_A = 25°C unless otherwise specified)

Characteristic	Symbol	Value	Unit
Peak pulse power (t _p = 8/20μs)	P _{PK}	600	W
Peak pulse current (t _p = 8/20μs)	I _{PP}	33	A
Reverse Stand-off Voltage	V _{RWM}	8	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 ~ +125	°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.	Unit
Reverse breakdown voltage	V_{BR}	$I_R=1\text{mA}$	8.5	-	-	V
Reverse leakage current ^(Note1)	I_R	$V_{RWM}=8\text{V}$	-	-	2	μA
Clamping voltage	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$	-	12	-	V
		$I_{PP}=33\text{A}$, $t_p=8/20\mu\text{s}$	-	-	18.5	V
Junction capacitance	C_J	$V_R=0\text{V}$, $f=1\text{MHz}$	-	90	-	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)

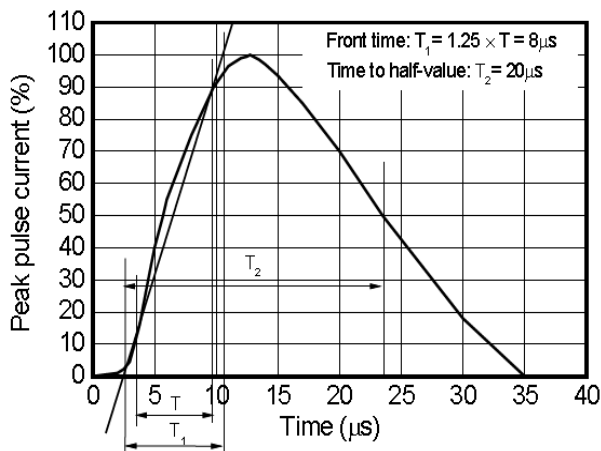


Fig 1 8/20 μs waveform per IEC61000-4-5

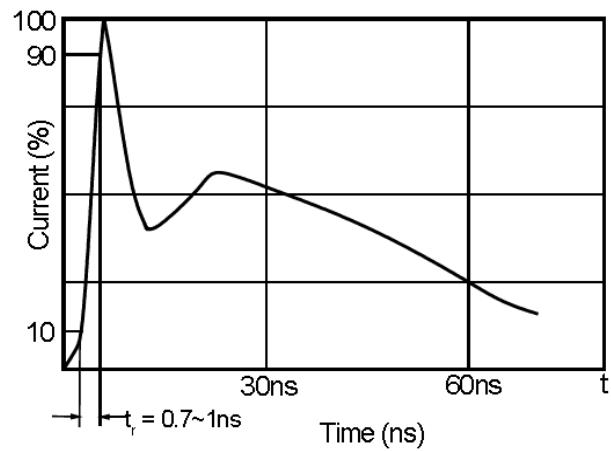


Fig 2 ESD pulse waveform according to IEC61000-4-2

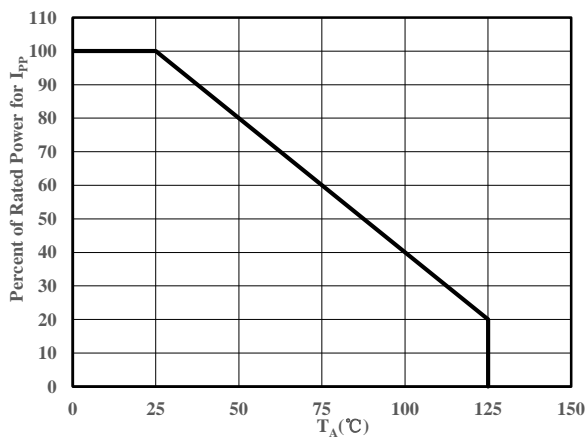
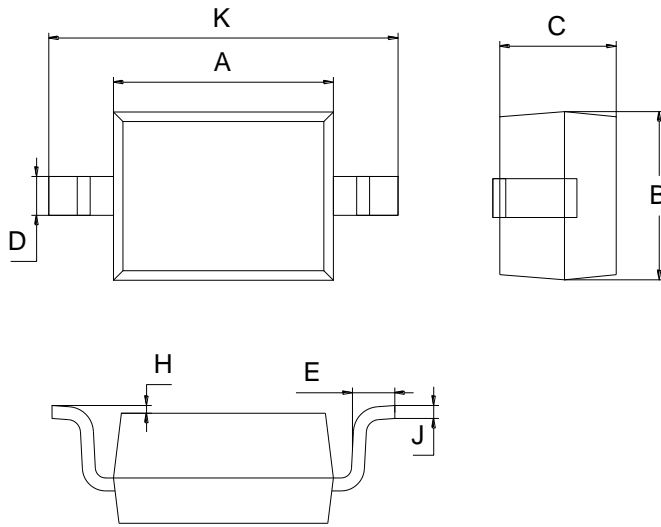


Fig 3 Power Derating Curve

Package Outline Dimensions (unit: mm)

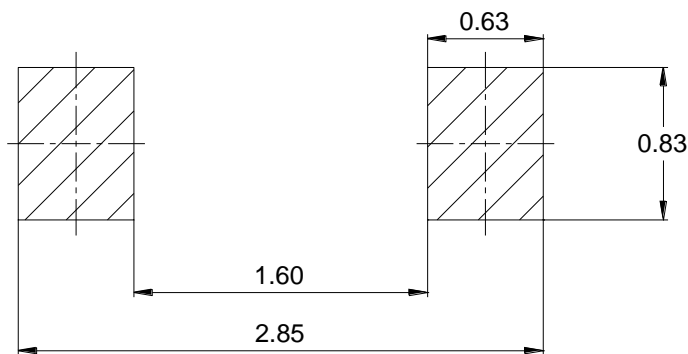
SOD-323



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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