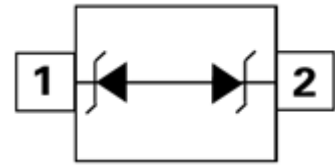


Features

- Transient protection for data&power lines to IEC 61000-4-2(ESD)30Kv(air),30kV(contact)
- Working Voltage: 8V
- Low clamping voltage
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

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
TESD08C	SOD-323	3000 pcs / Tape & Reel	08C

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

Characteristic	Symbol	Value	Unit
Peak pulse power (tp = 8/20μs)	P _{PK}	600	W
Peak pulse current (tp = 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	
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)

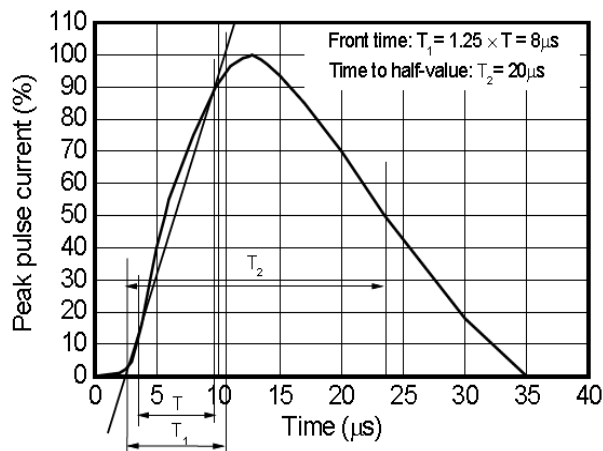


Fig 1 8/20 μs waveform per IEC61000-4-5

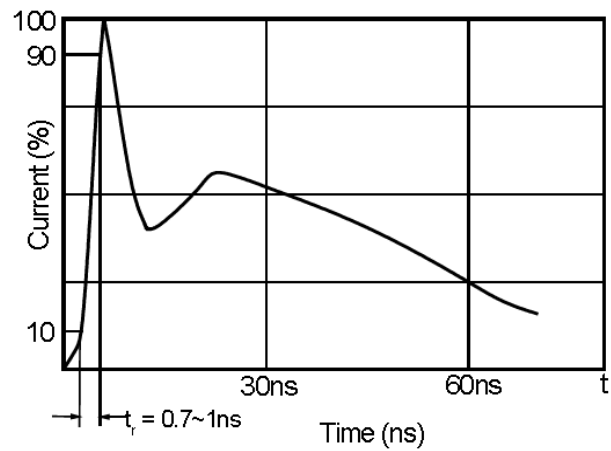


Fig 2 ESD pulse waveform according to IEC61000-4-2

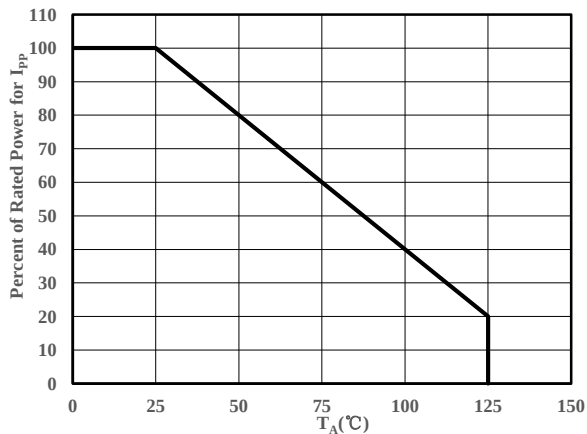
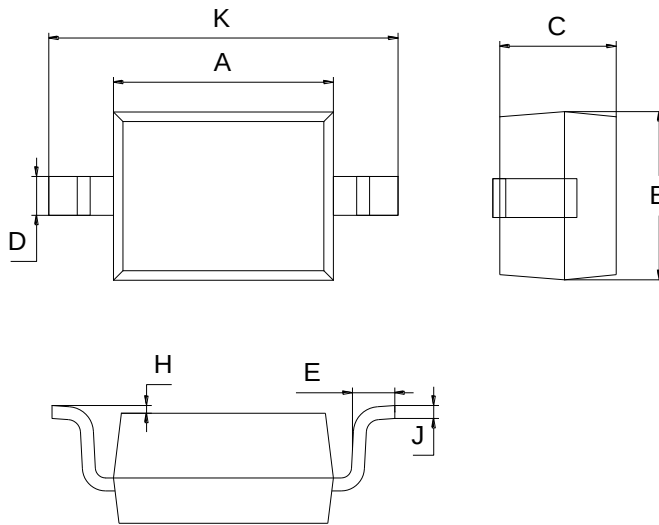


Fig 3 Power Derating Curve

Package Outline Dimensions (unit: mm)

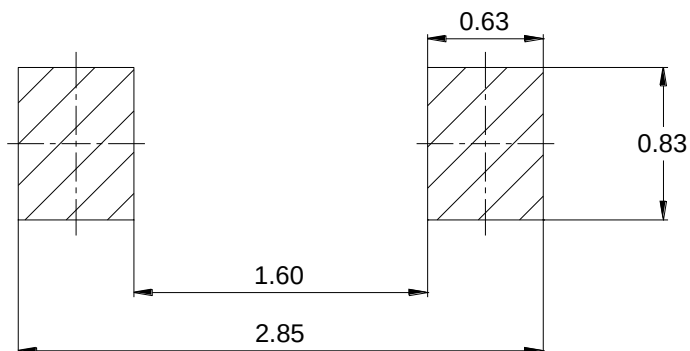
SOD-323



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



IMPORTANT NOTICE

Galaxy Microelectronics (GME) reserves the right to make changes without further notice to any product herein to make corrections, modifications, improvements, or other changes. GME does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others.