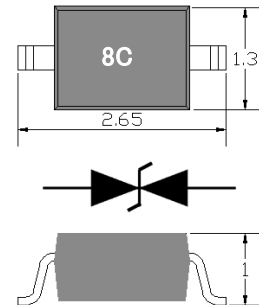


- ◇ For Sensitive ESD Protection
- ◇ ESD Protection, IEC61000-4-2
- ◇ RoHS compliant / Green EMC
- ◇ SOD323-GW Thin SMD package
- ◇ Matte Tin (Sn) Lead finish
- ◇ Cathode Band / Device marking
- ◇ Device Marking Code

SOD-323

Unit:mm


Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
$V_{ESD-Air}$	ESD Voltage IEC61000-4-2 Air	± 30	kV
$V_{ESD-contact}$	ESD Voltage IEC61000-4-2 Contact	± 30	kV
T_J	Junction Temperature	125	°C
T_{STG}	Storage Temperature	-55 to +150	°C
Ppp	Peak Pulse Power (tp=8/20 μ s waveform)	350	W
I_{PP}^{*1}	Maximum Reverse Peak Pulse Current	7	A

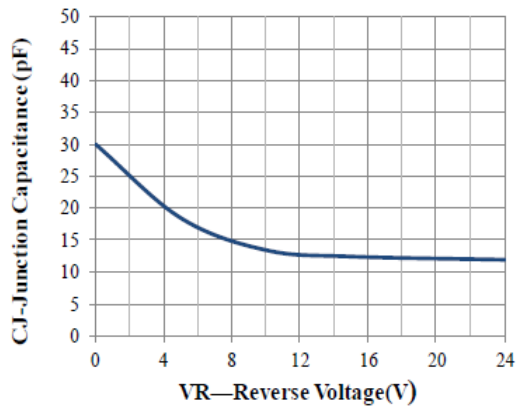
*1 $t_p = 8/20 \mu s$
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage	—			30	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	26.5		31	V
I_R	Reverse Current	$V_{RWM} = 30V$			1	μA
V_C	Clamping Voltage	$I_{PP}=1A, t_p = 8/20 \mu s$			35	V
V_C	Clamping Voltage	$I_{PP}=7A, t_p = 8/20 \mu s$			50	V
Ctot	Total capacitance	$V_R=0V, f=1MHz$			30	pF

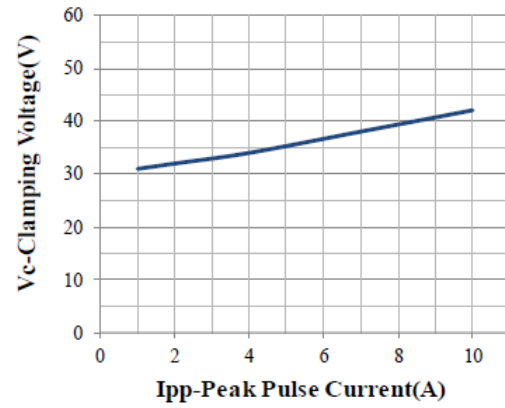
Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
PESD30V	SOD323	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

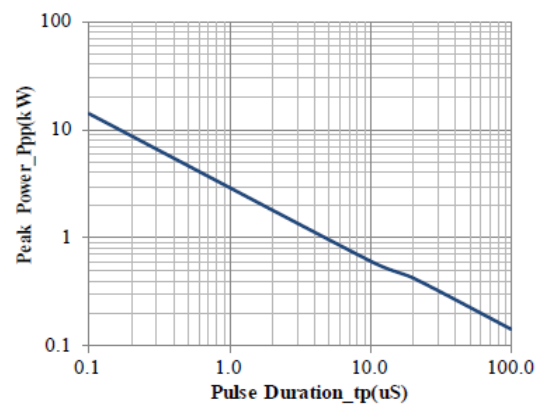
Typical Performance Characteristics (TA=25° C unless otherwise Specified)



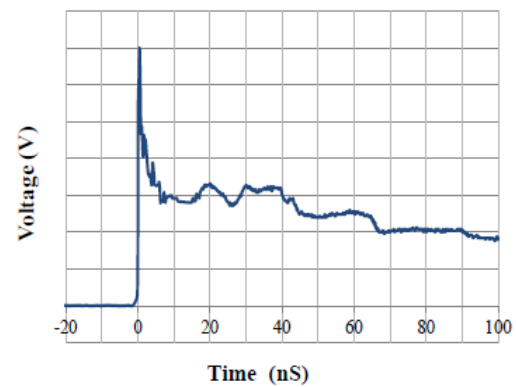
Junction Capacitance vs. Reverse Voltage



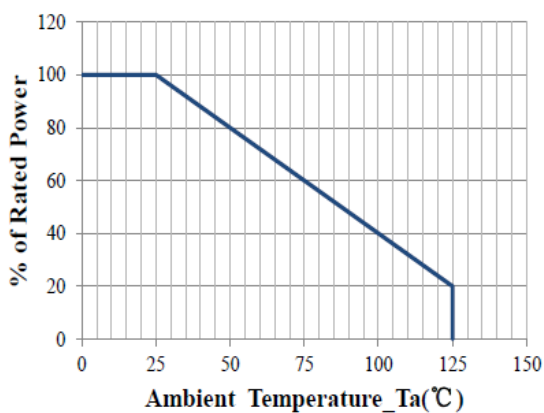
Clamping Voltage vs. Peak Pulse Current



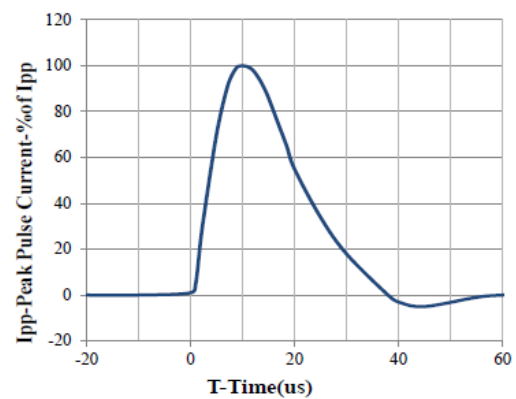
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform

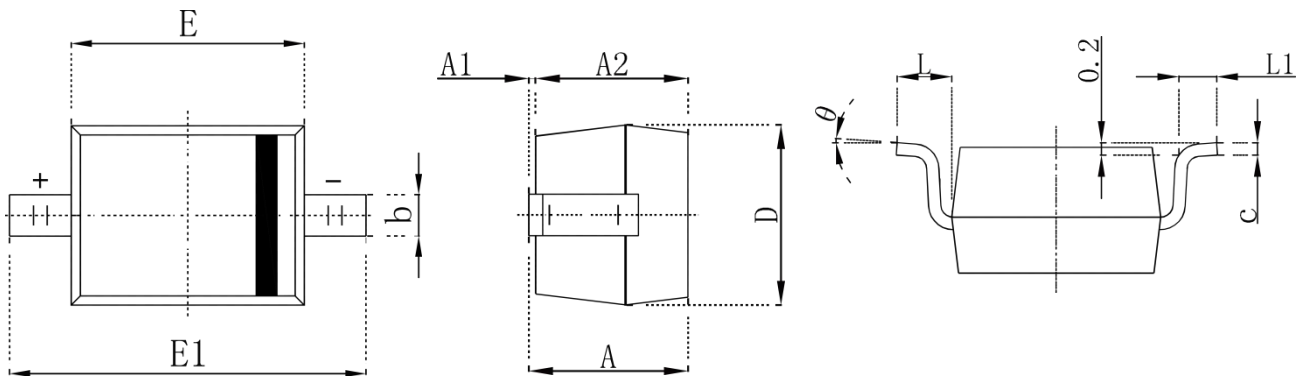


Power Derating Curve



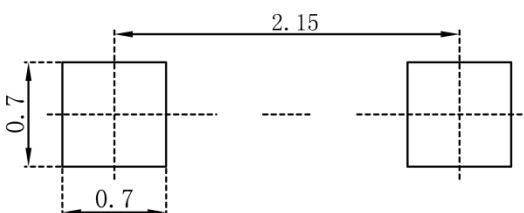
8 X 20us Pulse Waveform

SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.250	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout

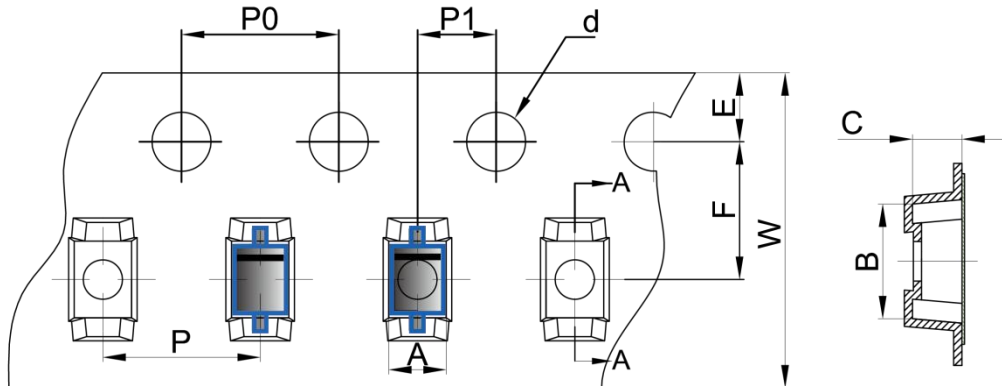


Note:

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

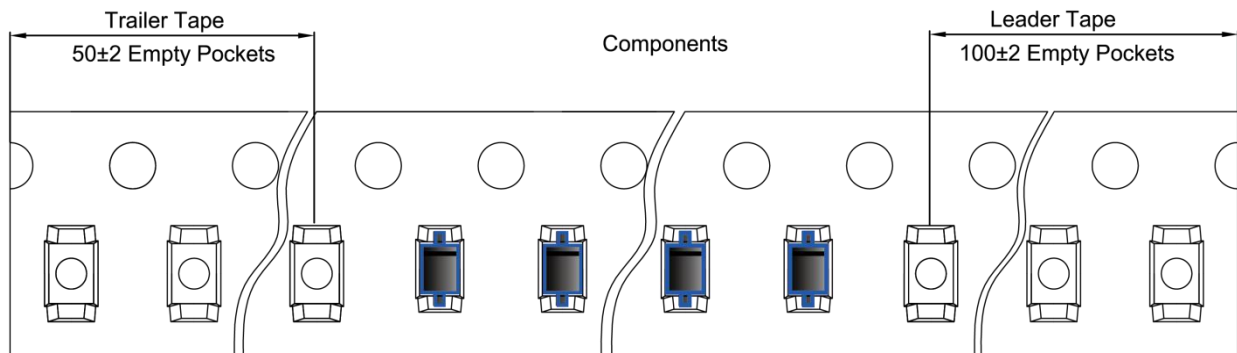
SOD-323 Tape and Reel

SOD-323 Embossed Carrier Tape

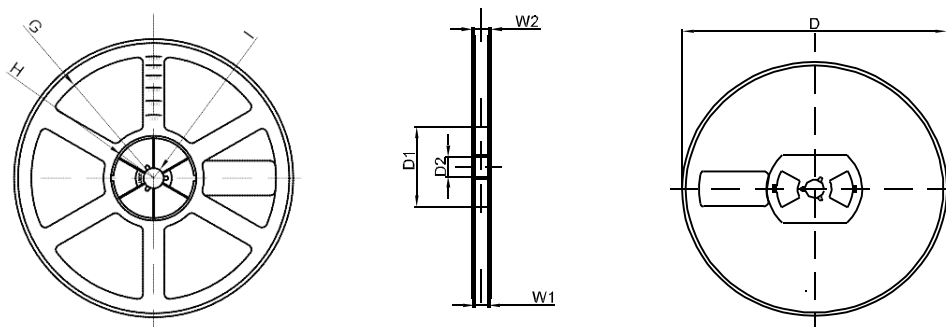


	DIMENSIONS ARE IN MILLIMETER									
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.48	3.3	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-323 Tape Leader and Trailer



SOD-323 Reel



	DIMENSIONS ARE IN MILLIMETER							
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1