

SOD-523 Plastic-Encapsulate Diodes

BZX584C5V1H ZENER DIODE

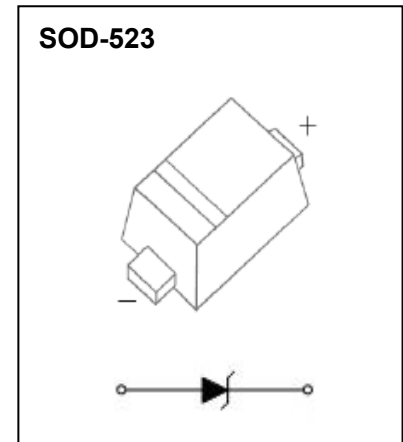
FEATURES

- Planar die construction
- General purpose, medium current
- Ideally suited for automated assembly processes
- Available in lead free version

MARKING: H8



The marking bar indicates the cathode



MAXIMUM RATINGS($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Value	Unit
P_D	Power Dissipation(Note 1)	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^\circ\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

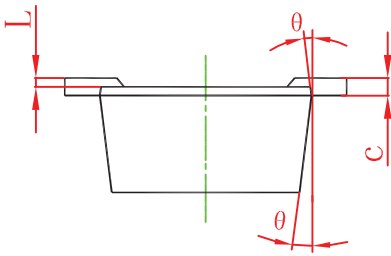
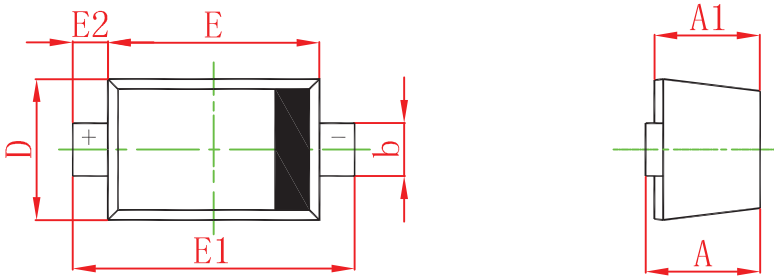
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Zener voltage range (Note 2)	V_Z	$I_{ZT}=5\text{mA}$	5.1		5.5	V
Maximum zener impedance(Note 3)	Z_{ZT}	$I_{ZT}=5\text{mA}$			50	Ω
	Z_{ZK}	$I_{ZK}=1\text{mA}$			450	
Maximum reverse current (Note 2)	I_R	$V_R=2\text{V}$			2	μA
		$V_R=4.2\text{V}$			50	
Forward voltage (Note 2)	V_F	$I_F = 10\text{mA}$			0.9	V

Notes: 1. Device mounted on a 1 in.² ceramic PCB which spread 2 ounces of copper.

2.Short duration test pulse used to minimize self-heating effect.

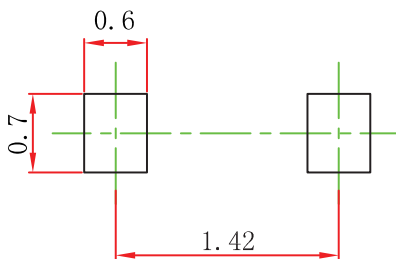
3. $f=1\text{kHz}$

SOD-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

SOD-523 Suggested Pad Layout



Note:

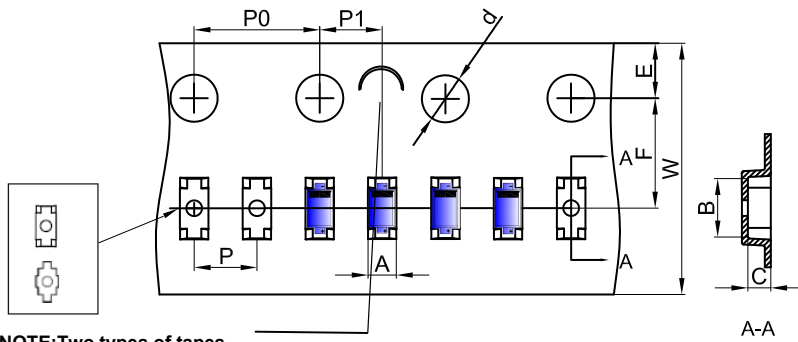
1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

SOD-523 Tape and Reel

SOD-523 Embossed Carrier Tape



Packaging Description:

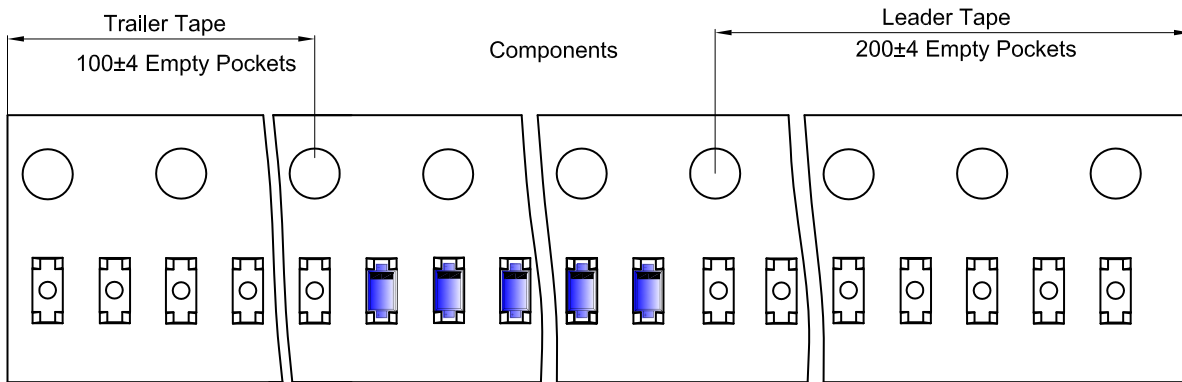
SOD-523 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 8,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

NOTE: Two types of tapes coexist side by side.

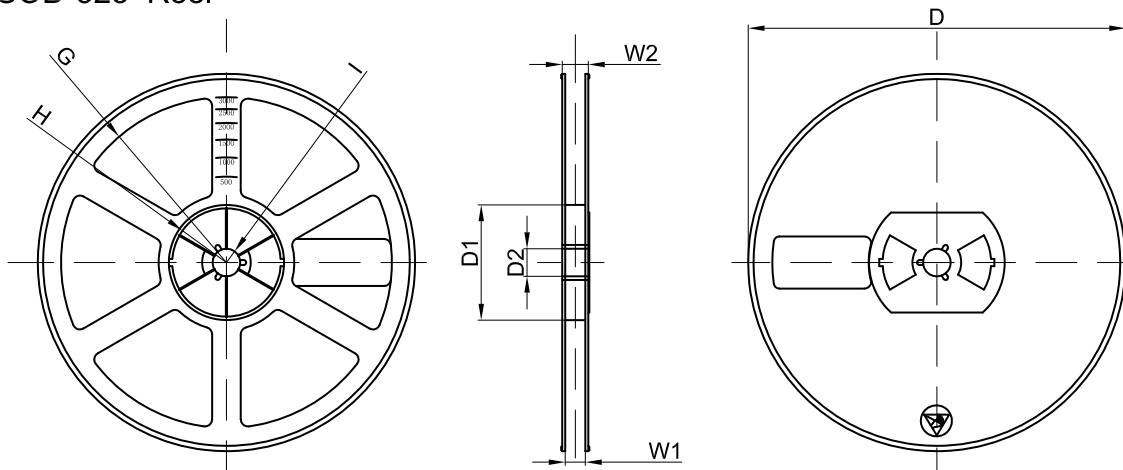
NOTE: TO CAVE 'C' ON CARRIER TAPE PER 120MM

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.9	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

SOD-523 Tape Leader and Trailer



SOD-523 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
8000 pcs	7 inch	120,000 pcs	203×203×195	480,000 pcs	438×438×220	