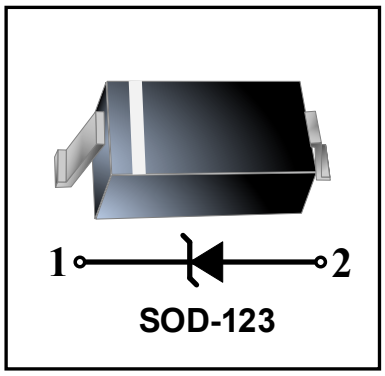
WZ50CxxxD1

ZENER DIODE



Features

- Constant Voltage Control
- Planar Die Construction
- Zener Voltages From 1.8V-43V

Mechanical Data

- SOD-123 Package
- Marking : Refer to Table List
- RoHS Compliant & HF
- Device meets MSL3 requirement

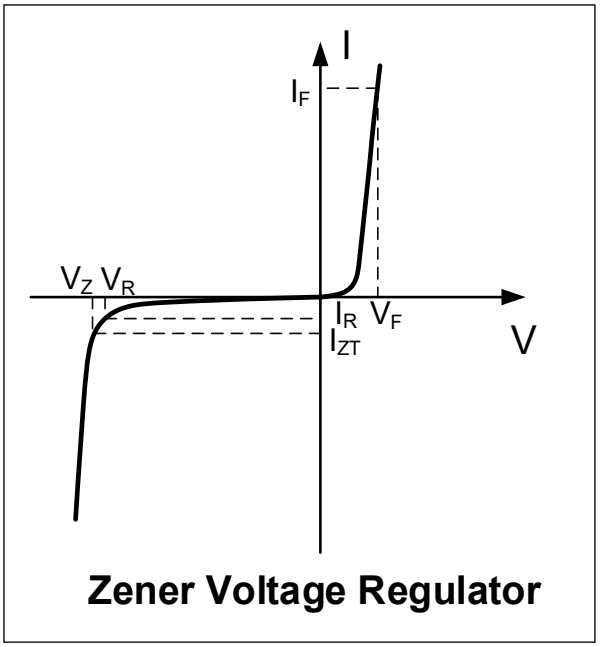
Absolute Maximum Rating (T_a=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Forward Voltage @ I_F = 10mA	V_F	0.9	V
Power Dissipation	P_D	500	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/W
Junction Temperature	T_J	-55 to +150	°C
Storage Temperature	T_{STG}	-55 to +150	°C

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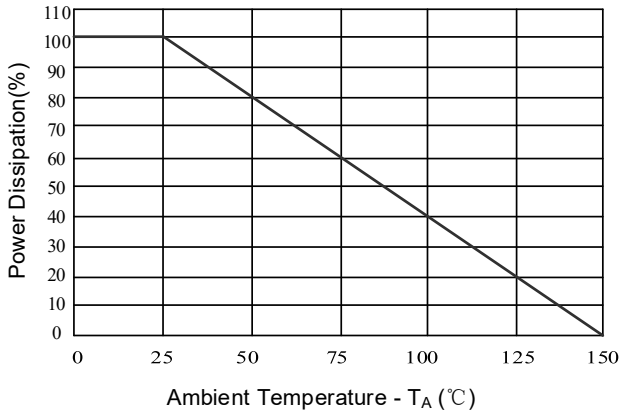
Electrical Parameters (T_a=25℃)

Symbol	Parameter
I_{ZT}	Reverse Current
V_Z	Reverse Zener Voltage @ I_{ZT}
V_R	Reverse Voltage
I_R	Reverse Leakage Current @ V_R
I_F	Forward Current
V_F	Forward Voltage @ I_F



Typical Characteristics

Figure 1: Power Derating Curve



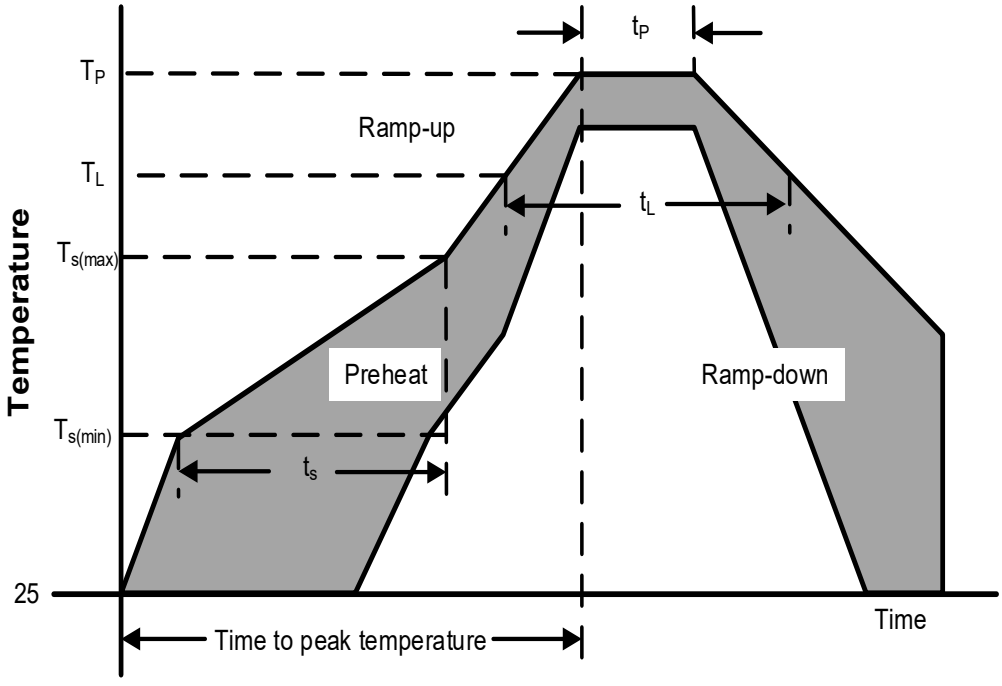
Electrical Characteristics

Type Number	Marking	Zener Voltage Range				Maximum Reverse Current	
		$V_Z@I_{ZT}$			I_{ZT}	I_R	V_R
		Nom(V)	Min(V)	Max(V)	(μA)	(μA)	(V)
WZ50C1V8D1	CC	1.8	1.71	1.89	50	7.5	1
WZ50C2V0D1	CD	2.0	1.90	2.10	50	5	1
WZ50C2V2D1	CE	2.2	2.09	2.31	50	4	1
WZ50C2V4D1	CF	2.4	2.28	2.52	50	2	1
WZ50C2V7D1	CH	2.7	2.565	2.835	50	1	1
WZ50C3V0D1	CJ	3.0	2.85	3.15	50	0.8	1
WZ50C3V3D1	CK	3.3	3.13	3.47	50	7.5	1.5
WZ50C3V6D1	CM	3.6	3.42	3.78	50	7.5	2
WZ50C3V9D1	CN	3.9	3.70	4.10	50	5	2
WZ50C4V3D1	CP	4.3	4.09	4.52	50	4	2
WZ50C4V7D1	CT	4.7	4.47	4.94	50	10	3
WZ50C5V1D1	CU	5.1	4.85	5.36	50	10	3
WZ50C5V6D1	CV	5.6	5.32	5.88	50	10	4
WZ50C6V2D1	CA	6.2	5.89	6.51	50	10	5
WZ50C6V8D1	CX	6.8	6.46	7.14	50	10	5.1
WZ50C7V5D1	CY	7.5	7.13	7.88	50	10	5.7
WZ50C8V2D1	CZ	8.2	7.79	8.61	50	1	6.2
WZ50C8V7D1	DC	8.7	5.27	9.14	50	1	6.6
WZ50C9V1D1	DD	9.1	8.65	9.56	50	1	6.9
WZ50C10VD1	DE	10	9.50	10.50	50	1	7.6
WZ50C11VD1	DF	11	10.45	11.55	50	0.05	8.4
WZ50C12VD1	DH	12	11.40	12.60	50	0.05	9.1
WZ50C13VD1	DJ	13	12.35	13.65	50	0.05	9.8
WZ50C14VD1	DM	14	13.30	14.70	50	0.05	10.6
WZ50C15VD1	DK	15	14.25	15.75	50	0.05	11.4
WZ50C16VD1	DN	16	15.20	16.80	50	0.05	12.1
WZ50C17VD1	DP	17	16.15	17.85	50	0.05	12.9
WZ50C18VD1	DT	18	17.10	18.90	50	0.05	13.6
WZ50C19VD1	DU	19	18.05	19.95	50	0.05	14.4
WZ50C20VD1	DV	20	19.00	21.00	50	0.01	15.2
WZ50C22VD1	DA	22	20.90	23.10	50	0.01	16.7
WZ50C24VD1	DX	24	22.80	25.20	50	0.01	18.2
WZ50C25VD1	DY	25	23.75	26.25	50	0.01	19.0
WZ50C27VD1	EA	27	25.65	28.35	50	0.01	20.4
WZ50C28VD1	EC	28	26.60	29.40	50	0.01	21.2
WZ50C30VD1	ED	30	28.50	31.50	50	0.01	22.8
WZ50C33VD1	EE	33	31.35	34.65	50	0.01	25.0
WZ50C36VD1	EF	36	34.20	37.80	50	0.01	27.3
WZ50C39VD1	EH	39	37.05	40.95	50	0.01	29.6
WZ50C43VD1	EJ	43	40.85	45.15	50	0.01	32.6

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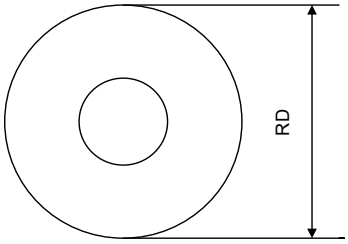
Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	Temperature Min ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (ts)	60 – 190 secs
Average ramp up rate (Liquidus Temp) (T_L) to peak		5°C/second max
$T_{S(max)}$ to T_L——Ramp-up Rate		5°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		260+0/-5 °C
Time within actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		280°C

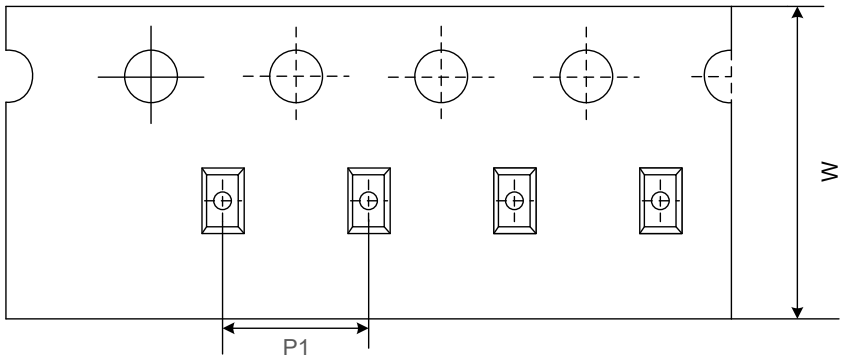


Tape And Reel Information

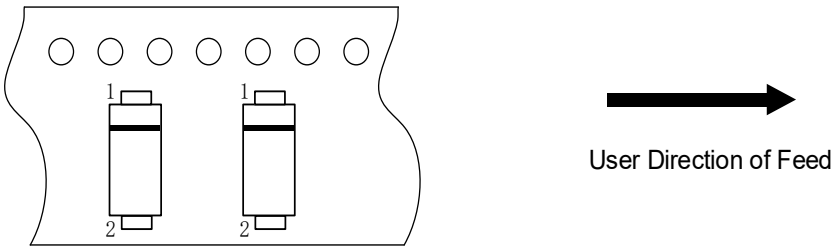
Reel Dimensions



Tape Dimensions



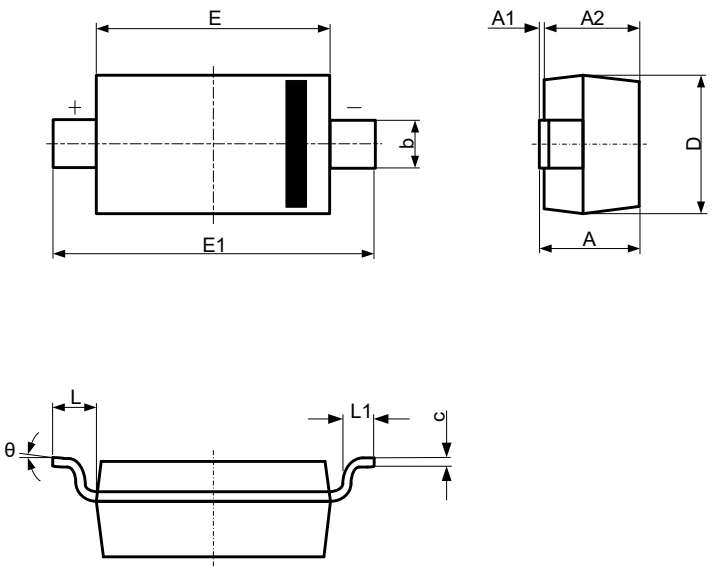
Quadrant Assignments For PIN1 Orientation In Tape

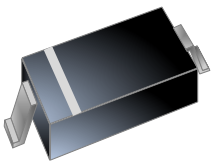


RD	Reel Dimensions	7 inch
W	Overall width of the carrier tape	8 mm
P1	Pitch between successive cavity centers	4 mm

Outline Drawing –SOD-123

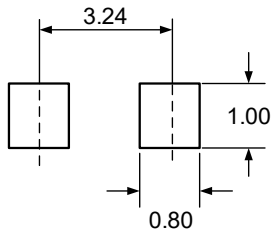
PACKAGE OUTLINE





SOD-123

SYMBOL	MILLIMETERS	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 REF	
L1	0.250	0.450
θ	0°	8°



DIMENSIONS: MILLIMETERS

Notes

Controlling Dimensions in Millimeters.

Package Information

Qty：3k/Reel

CONTACT INFORMATION

No.1001, Shiwan (7) Road, Pudong District, Shanghai, P.R.China.201207
Tel: 86-21-68969993 Fax: 86-21-50757680 Email: market@way-on.com
WAYON website: **http://www.way-on.com**
For additional information, please contact your local Sales Representative.

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1. The product specification aims to provide users with a reference regarding various product parameters, performance, and usage. It presents certain aspects of the product's performance in graphical form and is intended solely for users to select product and make product comparisons, enabling users to better understand and evaluate the characteristics and advantages of the product. It does not constitute any commitment, warranty, or guarantee.

2. The product parameters described in the product specification are numerical values, characteristics, and functions obtained through actual testing or theoretical calculations of the product in an independent or ideal state. Due to the complexity of product applications and variations in test conditions and equipment, there may be slight fluctuations in parameter test values. WAYON shall not guarantee that the actual performance of the product when installed in the customer's system or equipment will be entirely consistent with the product specification, especially concerning dynamic parameters. It is recommended that users consult with professionals for product selection and system design. Users should also thoroughly validate and assess whether the actual parameters and performance when installed in their respective systems or equipment meet their requirements or expectations. Additionally, users should exercise caution in verifying product compatibility issues, and WAYON assumes no responsibility for the application of the product.

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