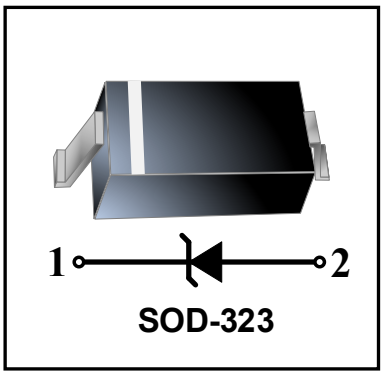
WZ50CxxxD3

ZENER DIODE



Features

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

Mechanical Data

- SOD-323 Package
- Marking : Refer to Table List
- RoHS Compliant & HF
- Device meets MSL3 requirement

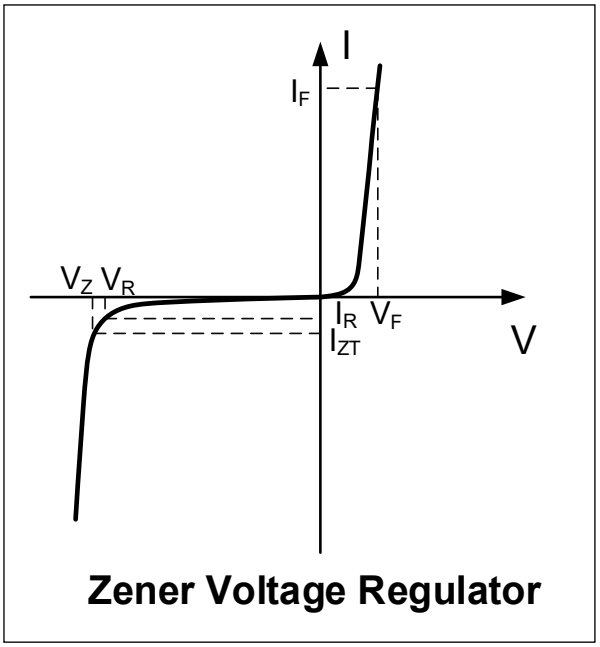
Absolute Maximum Rating (T_a=25°C unless otherwise noted)

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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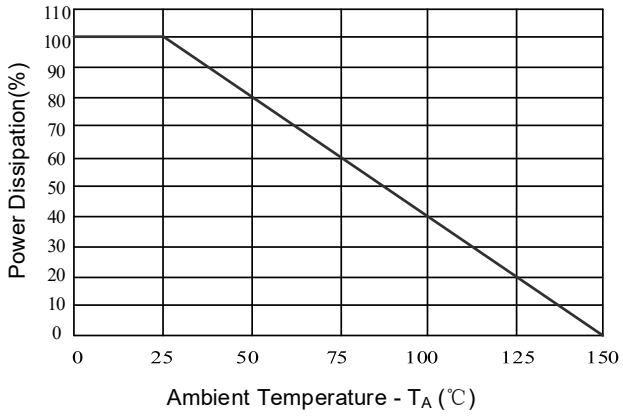
Electrical Parameters (T_a=25℃)

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



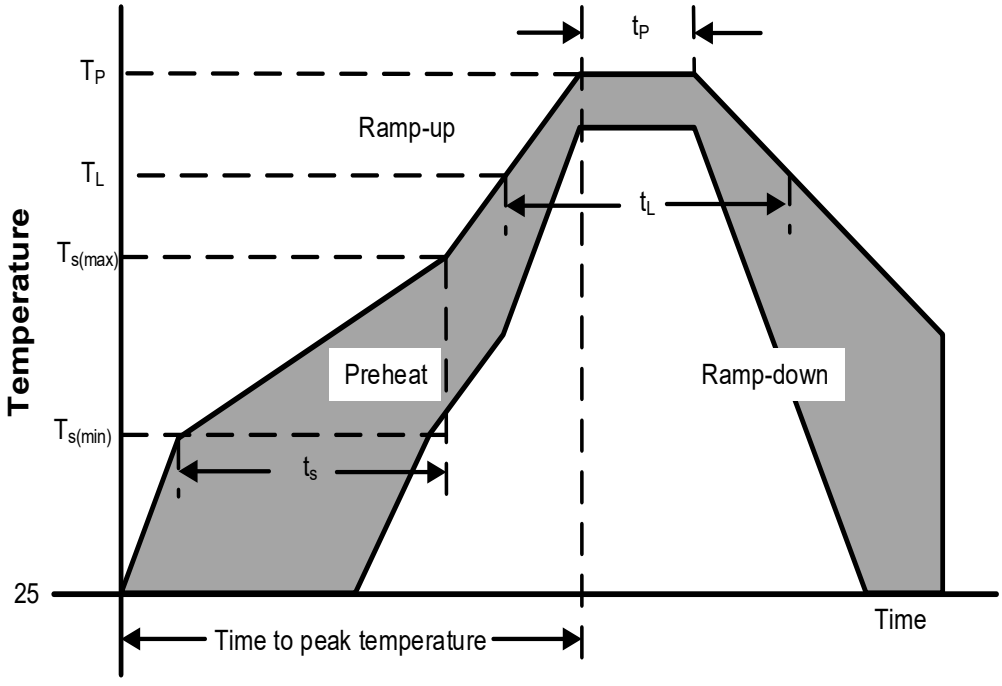
Electrical Characteristics

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)
WZ50C1V8D3	CC	1.8	1.71	1.89	50	7.5	1
WZ50C2V0D3	CD	2.0	1.90	2.10	50	5	1
WZ50C2V2D3	CE	2.2	2.09	2.31	50	4	1
WZ50C2V4D3	CF	2.4	2.28	2.52	50	2	1
WZ50C2V7D3	CH	2.7	2.565	2.835	50	1	1
WZ50C3V0D3	CJ	3.0	2.85	3.15	50	0.8	1
WZ50C3V3D3	CK	3.3	3.13	3.47	50	7.5	1.5
WZ50C3V6D3	CM	3.6	3.42	3.78	50	7.5	2
WZ50C3V9D3	CN	3.9	3.70	4.10	50	5	2
WZ50C4V3D3	CP	4.3	4.09	4.52	50	4	2
WZ50C4V7D3	CT	4.7	4.47	4.94	50	10	3
WZ50C5V1D3	CU	5.1	4.85	5.36	50	10	3
WZ50C5V6D3	CV	5.6	5.32	5.88	50	10	4
WZ50C6V2D3	CA	6.2	5.89	6.51	50	10	5
WZ50C6V8D3	CX	6.8	6.46	7.14	50	10	5.1
WZ50C7V5D3	CY	7.5	7.13	7.88	50	10	5.7
WZ50C8V2D3	CZ	8.2	7.79	8.61	50	1	6.2
WZ50C8V7D3	DC	8.7	8.27	9.14	50	1	6.6
WZ50C9V1D3	DD	9.1	8.65	9.56	50	1	6.9
WZ50C10VD3	DE	10	9.50	10.50	50	1	7.6
WZ50C11VD3	DF	11	10.45	11.55	50	0.05	8.4
WZ50C12VD3	DH	12	11.40	12.60	50	0.05	9.1
WZ50C13VD3	DJ	13	12.35	13.65	50	0.05	9.8
WZ50C14VD3	DM	14	13.30	14.70	50	0.05	10.6
WZ50C15VD3	DK	15	14.25	15.75	50	0.05	11.4
WZ50C16VD3	DN	16	15.20	16.80	50	0.05	12.1
WZ50C17VD3	DP	17	16.15	17.85	50	0.05	12.9
WZ50C18VD3	DT	18	17.10	18.90	50	0.05	13.6
WZ50C19VD3	DU	19	18.05	19.95	50	0.05	14.4
WZ50C20VD3	DV	20	19.00	21.00	50	0.01	15.2
WZ50C22VD3	DA	22	20.90	23.10	50	0.01	16.7
WZ50C24VD3	DX	24	22.80	25.20	50	0.01	18.2
WZ50C25VD3	DY	25	23.75	26.25	50	0.01	19.0
WZ50C27VD3	EA	27	25.65	28.35	50	0.01	20.4
WZ50C28VD3	EC	28	26.60	29.40	50	0.01	21.2
WZ50C30VD3	ED	30	28.50	31.50	50	0.01	22.8
WZ50C33VD3	EE	33	31.35	34.65	50	0.01	25.0
WZ50C36VD3	EF	36	34.20	37.80	50	0.01	27.3
WZ50C39VD3	EH	39	37.05	40.95	50	0.01	29.6
WZ50C43VD3	EJ	43	40.85	45.15	50	0.01	32.6

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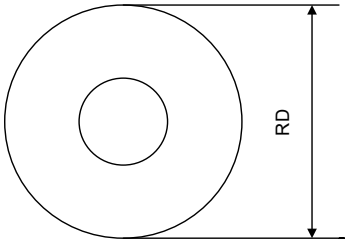
Soldering Parameters

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

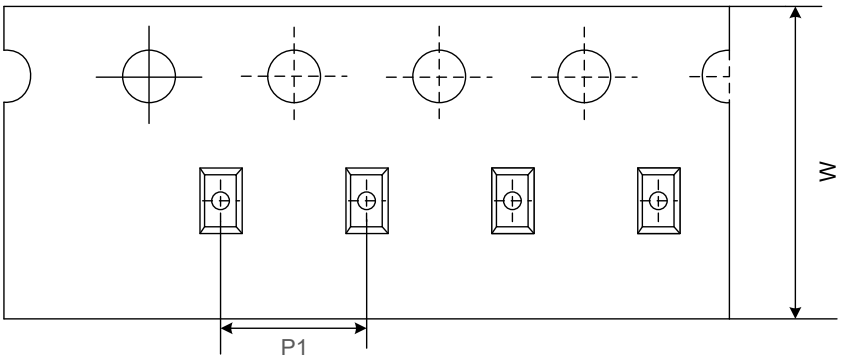


Tape And Reel Information

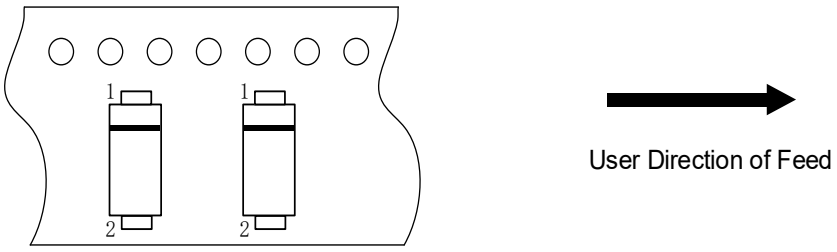
Reel Dimensions



Tape Dimensions



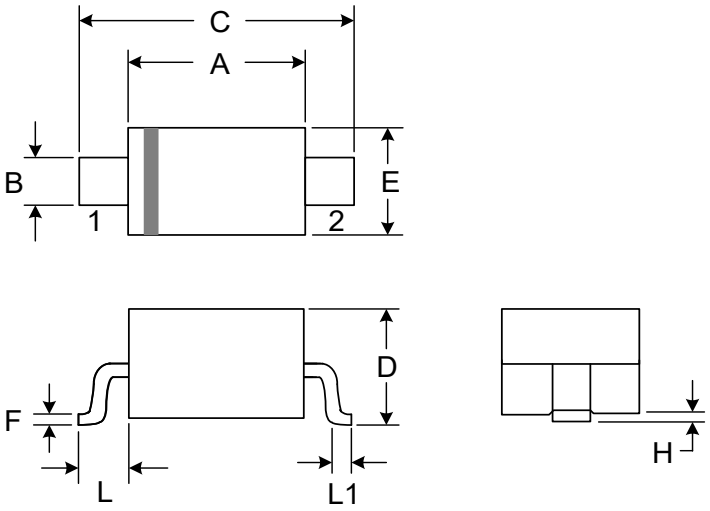
Quadrant Assignments For PIN1 Orientation In Tape

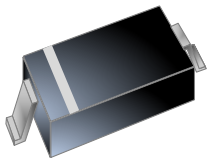


RD	Reel Dimensions	7 inch
W	Overall width of the carrier tape	8 mm
P1	Pitch between successive cavity centers	4 mm

Outline Drawing – SOD-323

PACKAGE OUTLINE

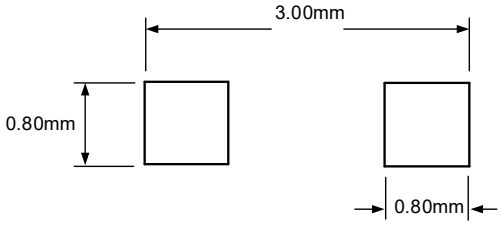




SOD-323

SYMBOL	MILLIMETERS	
	MIN	MAX
A	1.40	1.80
B	0.25	0.40
C	2.30	2.80
D	0.80	1.20
E	1.11	1.40
F	0.08	0.20
L	0.475 REF	
L1	0.20	0.50
H	0.00	0.20

MOUNTING PAD



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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