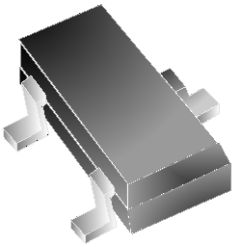
WZ5CxxxKT

ZENER DIODE

Features

- Constant Voltage Control
- Planar Die Construction
- Zener Voltages From 2.4V-75V

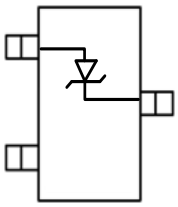


SOT-23

Mechanical Characteristics

- SOT-23 Package
- Marking : Refer to Table List
- RoHS Compliant & HF
- Device meets MSL3 requirement

Schematic & PIN Configuration



SOT-23(Top View)

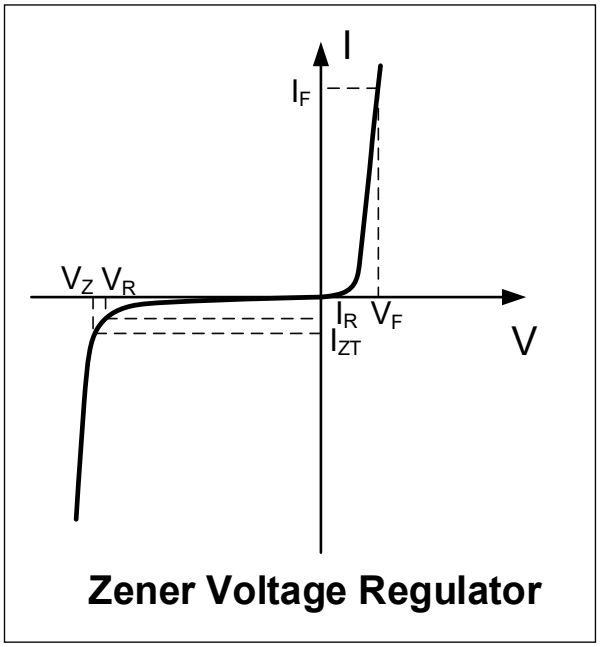
Absolute Maximum Rating

Parameter	Symbol	Value	Units
Power Dissipation	P_D	350	mW
Maximum Forward Voltage @ IF=10mA	V_F	0.9	V
Peak Forward Surge Current	I_{FSM}	2	A
Junction Temperature	T_J	-55 to + 150	°C
Storage Temperature Range	T_{STG}	-55 to + 150	°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W

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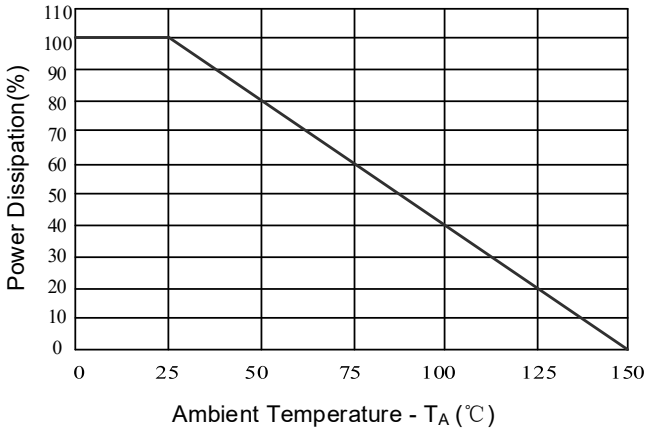
Electrical Parameters (T_a=25℃)

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



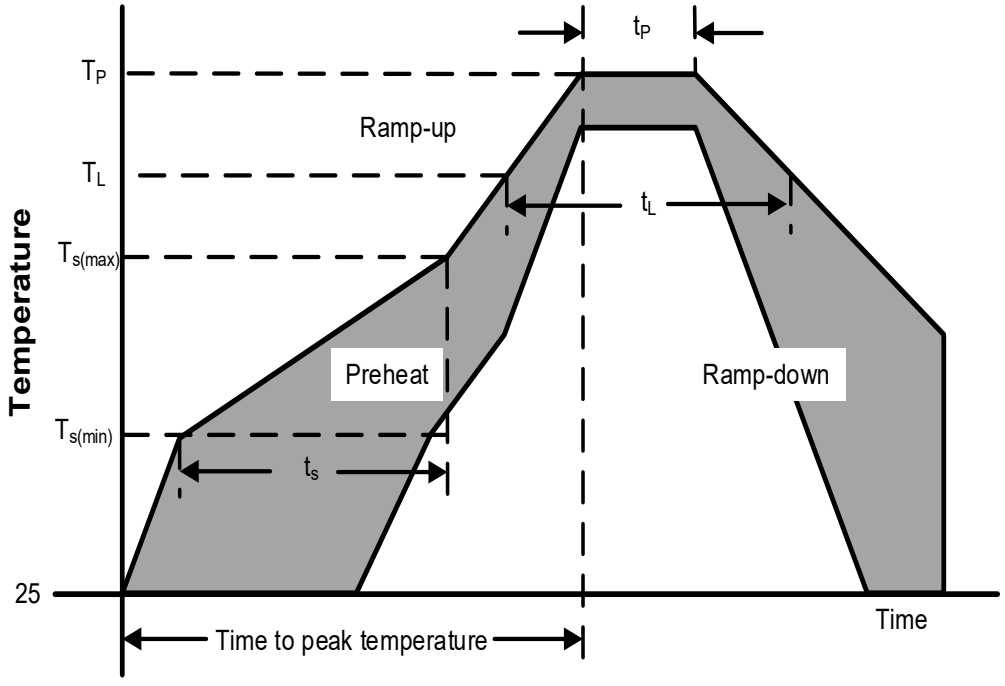
Electrical Characteristics(Ta=25°C unless otherwise noted)

Type Number	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	V_R
		Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)
WZ5C2V4KT	Z11	2.4	2.2	2.6	5	100	600	1	50	1
WZ5C2V7KT	Z12	2.7	2.5	2.9	5	100	600	1	20	1
WZ5C3V0KT	Z13	3	2.8	3.2	5	95	600	1	10	1
WZ5C3V3KT	Z14	3.3	3.1	3.5	5	95	600	1	5	1
WZ5C3V6KT	Z15	3.6	3.4	3.8	5	90	600	1	5	1
WZ5C3V9KT	Z16	3.9	3.7	4.1	5	90	600	1	3	1
WZ5C4V3KT	Z17	4.3	4	4.6	5	90	600	1	3	1
WZ5C4V7KT	Z1	4.7	4.4	5	5	80	500	1	3	2
WZ5C5V1KT	Z2	5.1	4.8	5.4	5	60	480	1	2	2
WZ5C5V6KT	Z3	5.6	5.2	6	5	40	400	1	1	2
WZ5C6V2KT	Z4	6.2	5.8	6.6	5	10	150	1	3	4
WZ5C6V8KT	Z5	6.8	6.4	7.2	5	15	80	1	2	4
WZ5C7V5KT	Z6	7.5	7	7.9	5	15	80	1	1	5
WZ5C8V2KT	Z7	8.2	7.7	8.7	5	15	80	1	0.7	5
WZ5C9V1KT	Z8	9.1	8.5	9.6	5	15	100	1	0.5	6
WZ5C10VKT	Z9	10	9.4	10.6	5	20	150	1	0.2	7
WZ5C11VKT	Y1	11	10.4	11.6	5	20	150	1	0.1	8
WZ5C12VKT	Y2	12	11.4	12.7	5	25	150	1	0.1	8
WZ5C13VKT	Y3	13	12.4	14.1	5	30	170	1	0.1	8
WZ5C15VKT	Y4	15	13.8	15.8	5	30	200	1	0.05	10.5
WZ5C16VKT	Y5	16	15.3	17.1	5	40	200	1	0.05	11.2
WZ5C18VKT	Y6	18	16.8	19.1	5	45	225	1	0.05	12.6
WZ5C20VKT	Y7	20	18.8	21.2	5	55	225	1	0.05	14
WZ5C22VKT	Y8	22	20.8	23.3	5	55	250	1	0.05	15.4
WZ5C24VKT	Y9	24	22.8	25.6	5	70	250	1	0.05	16.8
WZ5C27VKT	Y10	27	25.1	28.9	2	80	300	0.5	0.05	18.9
WZ5C30VKT	Y11	30	28	32	2	80	300	0.5	0.05	21
WZ5C33VKT	Y12	33	31	35	2	80	325	0.5	0.05	23.1
WZ5C36VKT	Y13	36	34	38	2	90	350	0.5	0.05	25.2
WZ5C39VKT	Y14	39	37	41	2	130	350	0.5	0.05	27.3
WZ5C43VKT	Y15	43	40	46	2	150	375	0.5	0.05	30.1
WZ5C47VKT	Y16	47	44	50	2	170	375	0.5	0.05	32.9
WZ5C51VKT	Y17	51	48	54	2	180	400	0.5	0.05	35.7
WZ5C56VKT	Y18	56	52	60	2	200	425	0.5	0.05	39.2
WZ5C62VKT	Y19	62	58	66	2	215	450	0.5	0.05	43.4
WZ5C68VKT	Y20	68	64	72	2	240	475	0.5	0.05	47.6
WZ5C75VKT	Y21	75	70	79	2	255	500	0.5	0.05	52.5

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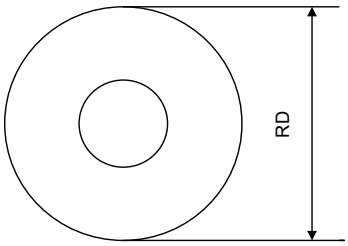
Soldering Parameters

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

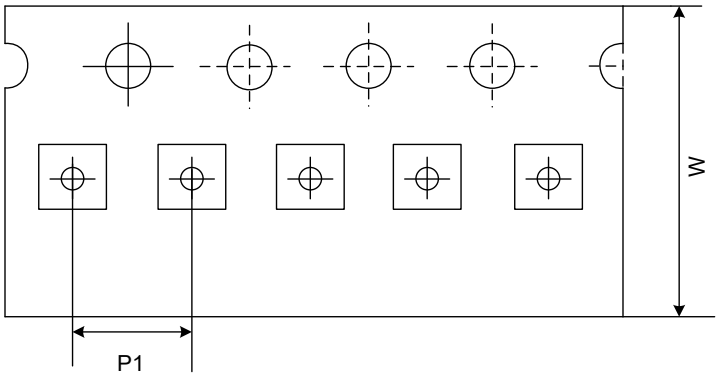


Tape And Reel Information

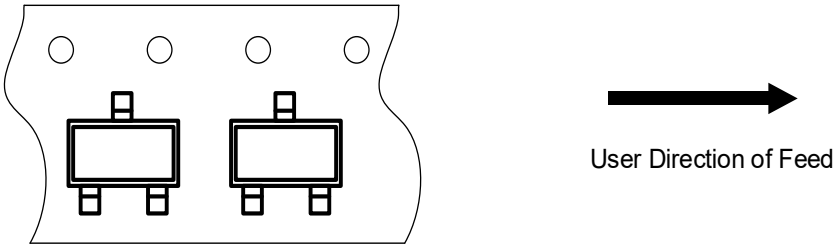
Reel Dimensions



Tape Dimensions



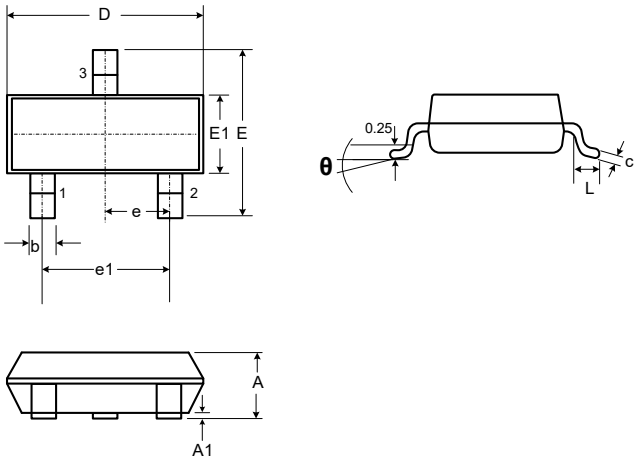
Quadrant Assignments For PIN1 Orientation In Tape

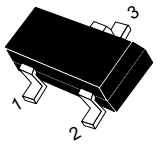


RD	Reel Dimensions	7 inch
W	Overall width of the carrier tape	8 mm
P1	Pitch between successive cavity centers	4 mm

Outline Drawing – SOT-23

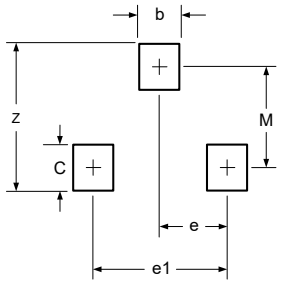
PACKAGE OUTLINE





SOT-23

SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.90	1.15
A1	0.00	0.15
b	0.30	0.55
c	0.07	0.20
D	2.80	3.10
E	2.10	2.65
E1	1.20	1.40
e	0.95 BSC	
e1	1.78	2.05
L	0.30	0.50
θ	0°	8°



DIMENSIONS		
DIM	INCHES	MILLIMETERS
M	0.0795	2.02
C	0.0315	0.80
Z	0.111	2.82
e	0.037 BSC	0.95 BSC
e1	0.075 BSC	1.9 BSC
b	0.0315	0.80

Notes:
Controlling Dimension: Millimeter.

Package Information

Qty：3k/Reel

CONTACT INFORMATION

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WAYON website: **http://www.way-on.com**
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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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