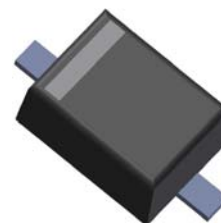


## 200mW SOD-323 SURFACE MOUNT Small Outline Flat Lead Plastic Package Zener Voltage Regulators

Green Product



SOD-323 Flat Lead

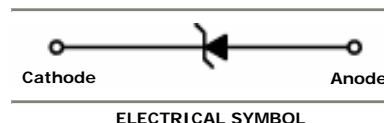
### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	200	mW
$T_{STG}$	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
$T_{OPR}$	Operating Temperature Range	-65 to +150	$^\circ\text{C}$

These ratings are limiting values above which the serviceability of the diode may be impaired.

### Specification Features:

- Zener Voltage Range Selection, 2.4V to 36V
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode



### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Device Type	Device Marking	$V_Z @ I_{ZT}$ (Volts)		$I_{ZT}$ (mA)	$Z_{ZT} @ I_{ZT}$ ( $\Omega$ ) Max	$I_{ZK}$ (mA)	$Z_{ZK} @ I_{ZK}$ ( $\Omega$ ) Max	$I_R @ V_R$ ( $\mu\text{A}$ ) Max	$V_R$ (Volts)
		Min	Max						
UDZS2V4BW	D=	2.43	2.63	5	100	0.5	1000	120	1
UDZS2V7BW	D≡	2.69	2.91	5	110	0.5	1000	100	1
UDZS3V0BW	D>	3.01	3.22	5	120	0.5	1000	50	1
UDZS3V3BW	D<	3.32	3.53	5	120	0.5	1000	20	1
UDZS3V6BW	D0	3.60	3.85	5	90	1	600	4.5	1
UDZS3V9BW	D1	3.89	4.16	5	90	1	600	2.7	1
UDZS4V3BW	D2	4.17	4.43	5	90	1	600	2.7	1
UDZS4V7BW	D3	4.55	4.75	5	80	1	500	2.7	2
UDZS5V1BW	D4	4.98	5.20	5	60	1	500	1.8	2
UDZS5V6BW	D5	5.49	5.73	5	40	1	300	0.9	2
UDZS6V2BW	D6	6.06	6.33	5	40	1	150	2.7	4
UDZS6V8BW	D7	6.65	6.93	5	30	1	75	1.8	4
UDZS7V5BW	D8	7.28	7.60	5	30	1	75	0.9	5
UDZS8V2BW	D9	8.02	8.36	5	30	1	75	0.63	5
UDZS9V1BW	DA	8.85	9.23	5	30	1	90	0.45	6
UDZS10VBW	DB	9.77	10.21	5	20	1	150	0.18	7
UDZS11VBW	DC	10.76	11.22	5	20	1	150	0.09	8
UDZS12VBW	DE	11.74	12.24	5	20	1	150	0.09	8
UDZS13VBW	DF	12.91	13.49	5	40	1	160	0.09	8
UDZS15VBW	DG	14.34	14.98	5	40	1	190	0.045	10.5
UDZS16VBW	DH	15.85	16.51	5	40	1	190	0.045	11.2
UDZS18VBW	DJ	17.56	18.35	5	50	1	220	0.045	12.6

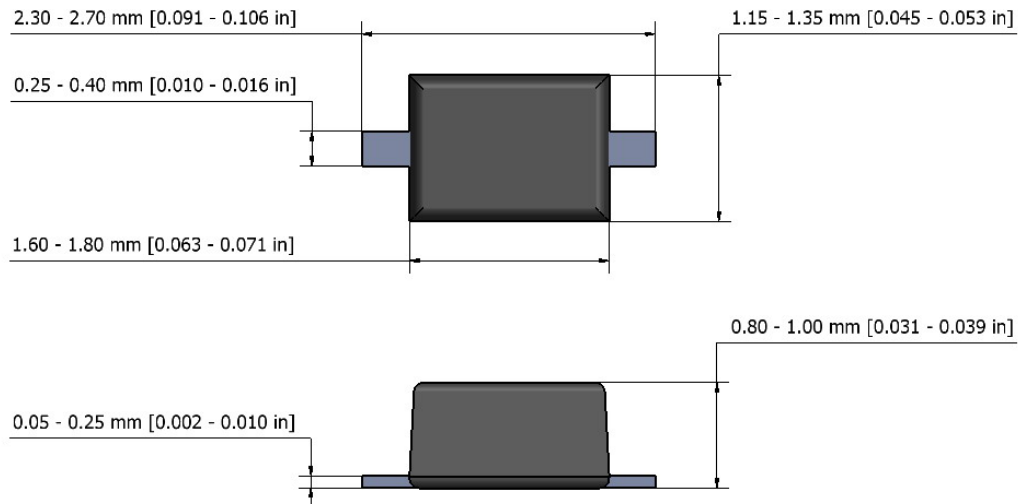
**Electrical Characteristics**  $T_A = 25^\circ\text{C}$  unless otherwise noted

Device Type	Device Marking	$V_Z @ I_{ZT}$ (Volts)		$I_{ZT}$ (mA)	$Z_{ZT} @ I_{ZT}$ ( $\Omega$ ) Max	$I_{ZK}$ (mA)	$Z_{ZK} @ I_{ZK}$ ( $\Omega$ ) Max	$I_R @ V_R$ ( $\mu\text{A}$ ) Max	$V_R$ (Volts)
		Min	Max						
UDZS20VBW	DK	19.52	20.39	5	60	1	220	0.045	14.0
UDZS22VBW	DL	21.54	22.47	5	80	1	240	0.045	15.4
UDZS24VBW	DM	23.72	24.78	5	80	1	240	0.045	16.8
UDZS27VBW	DN	26.19	27.53	5	100	0.5	300	0.045	18.9
UDZS30VBW	DP	29.19	30.69	5	100	0.5	300	0.045	21.0
UDZS33VBW	DR	32.15	33.79	5	100	0.5	310	0.045	23.0
UDZS36VBW	DS	35.07	36.87	5	100	0.5	330	0.045	25.2

$V_F$  Forward Voltage = 1 V Maximum @  $I_F = 10$  mA for all types

**Notes:**

1. The Zener Voltage ( $V_Z$ ) is tested under pulse condition of 10mS.
2. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest Tak Cheong Electronics representative.
3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current ( $I_{ZT}$  or  $I_{ZK}$ ) is superimposed to  $I_{ZT}$  or  $I_{ZK}$ .


**SOD-323 Package Outline**

NOTE: The above package outline is similar to JEITA SC-90.

This datasheet presents technical data of Tak Cheong's Zener Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance.

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