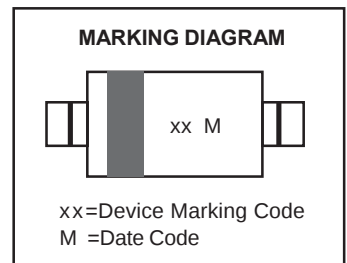
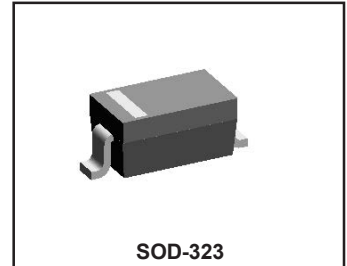


FEATURES

- Non-wire bonding structure improves
- High demand voltage range (3.6V-36V)
- This is a Pb-Free device

CONSTRUCTION

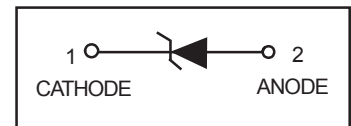
- Silicon epitaxial planar
- We declare that the material of product compliance with RoHS requirements.
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P	200	mW
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +150	°C
Operating temperature	T _{opr}	-55 to +150	°C
Typical Thermal Resistance	R _{θJA}	625	°C/W
	R _{θJC}	500	°C/W

1. FR-4 Minimum Pad



DEVICE MARKING CODE

Device	Marking	Device	Marking	Device	Marking
UDZS2.0BT1	02	UDZS5.6BT1	C2	UDZS16BT1	55
UDZS2.2BT1	12	UDZS6.2BT1	E2	UDZS18BT1	65
UDZS2.4BT1	22	UDZS6.8BT1	F2	UDZS20BT1	75
UDZS2.7BT1	32	UDZS7.5BT1	H2	UDZS22BT1	85
UDZS3.0BT1	42	UDZS8.2BT1	J2	UDZS24BT1	95
UDZS3.3BT1	52	UDZS9.1BT1	L2	UDZS27BT1	A5
UDZS3.6BT1	62	UDZS10BT1	05	UDZS30BT1	C5
UDZS3.9BT1	72	UDZS11BT1	15	UDZS33BT1	E5
UDZS4.3BT1	82	UDZS12BT1	25	UDZS36BT1	F5
UDZS4.7BT1	92	UDZS13BT1	35	-	-
UDZS5.1BT1	A2	UDZS15BT1	45	-	-

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted, $V_F = 0.9\text{ V Max.}$ @ $I_F = 10\text{ mA}$ for all types)

Device	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	$V_Z(\text{V})$			$Z_{zt}(\Omega)$		$Z_{zk}(\Omega)$		$I_R(\mu\text{A})$	
	Min.	Max.	$I_{zt}(\text{mA})$	Max.	$I_{zt}(\text{mA})$	Max.	$I_{zk}(\text{mA})$	Max.	$V_R(\text{V})$
UDZS2.0BT1	2.020	2.200	5	100	5	1000	0.5	120	0.5
UDZS2.2BT1	2.220	2.410	5	100	5	1000	0.5	120	0.7
UDZS2.4BT1	2.430	2.630	5	100	5	1000	0.5	100	1.0
UDZS2.7BT1	2.690	2.910	5	110	5	1000	0.5	100	1.0
UDZS3.0BT1	3.010	3.220	5	120	5	1000	0.5	50	1.0
UDZS3.3BT1	3.320	3.530	5	120	5	1000	0.5	20	1.0
UDZS3.6BT1	3.600	3.845	5	100	5	1000	1.0	10	1.0
UDZS3.9BT1	3.890	4.160	5	100	5	1000	1.0	5	1.0
UDZS4.3BT1	4.170	4.430	5	100	5	1000	1.0	5	1.0
UDZS4.7BT1	4.550	4.750	5	100	5	800	0.5	2	1.0
UDZS5.1BT1	4.980	5.200	5	80	5	500	0.5	2	1.5
UDZS5.6BT1	5.490	5.730	5	60	5	200	0.5	1	2.5
UDZS6.2BT1	6.060	6.330	5	60	5	100	0.5	1	3.0
UDZS6.8BT1	6.650	6.930	5	40	5	60	0.5	0.5	3.5
UDZS7.5BT1	7.280	7.600	5	30	5	60	0.5	0.5	4.0
UDZS8.2BT1	8.020	8.360	5	30	5	60	0.5	0.5	5.0
UDZS9.1BT1	8.850	9.230	5	30	5	60	0.5	0.5	6.0
UDZS10BT1	9.770	10.210	5	30	5	60	0.5	0.1	7.0
UDZS11BT1	10.760	11.220	5	30	5	60	0.5	0.1	8.0
UDZS12BT1	11.740	12.240	5	30	5	80	0.5	0.1	9.0
UDZS13BT1	12.910	13.490	5	37	5	80	0.5	0.1	10.0
UDZS15BT1	14.340	14.980	5	42	5	80	0.5	0.1	11.0
UDZS16BT1	15.850	16.510	5	50	5	80	0.5	0.1	12.0
UDZS18BT1	17.560	18.350	5	65	5	80	0.5	0.1	13.0
UDZS20BT1	19.520	20.390	5	85	5	100	0.5	0.1	15.0
UDZS22BT1	21.540	22.470	5	100	5	100	0.5	0.1	17.0
UDZS24BT1	23.720	24.780	5	120	5	120	0.5	0.1	19.0
UDZS27BT1	26.190	27.530	5	150	5	150	0.5	0.1	21.0
UDZS30BT1	29.190	30.690	5	200	5	200	0.5	0.1	23.0
UDZS33BT1	32.150	33.790	5	250	5	250	0.5	0.1	25.0
UDZS36BT1	35.070	36.870	5	300	5	300	0.5	0.1	27.0

Notes) 1. The Zener voltage (V_Z) is measured 40ms after power is supplied.

2. The operating resistances (Z_z , Z_{zk}) are measured by superimposing a minute alternating current on the regulated current (I_z).

ELECTRICAL CHARACTERISTIC CURVES (Ta=25°C)

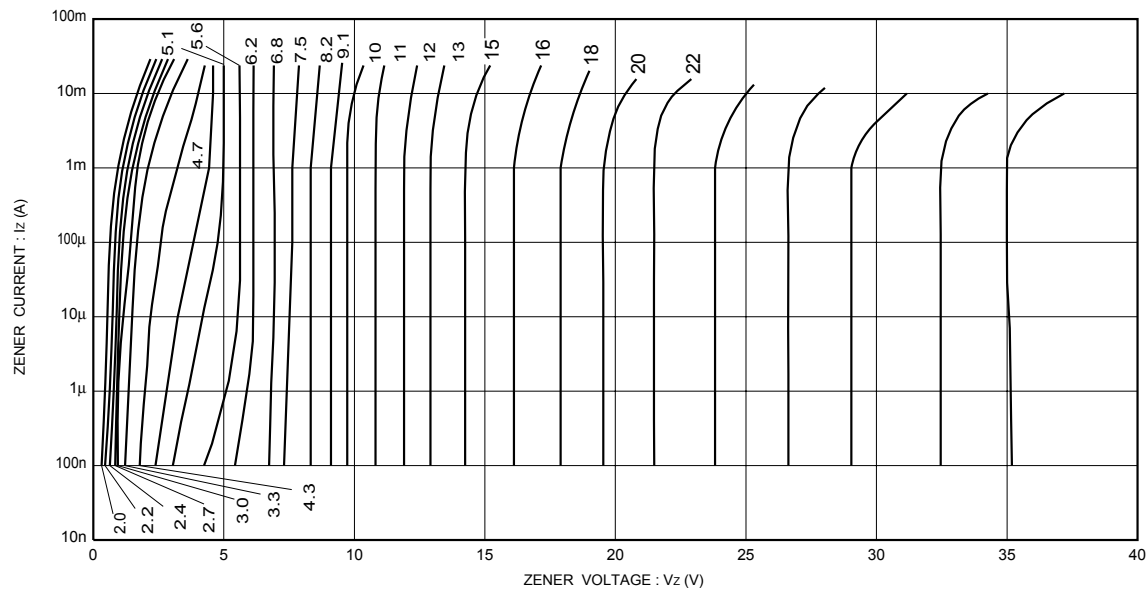


Fig.1 Zener voltage characteristics

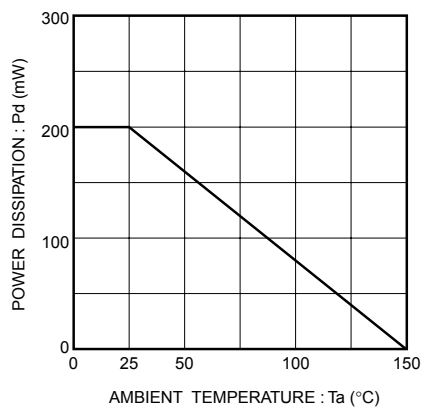


Fig.2 Derating curve

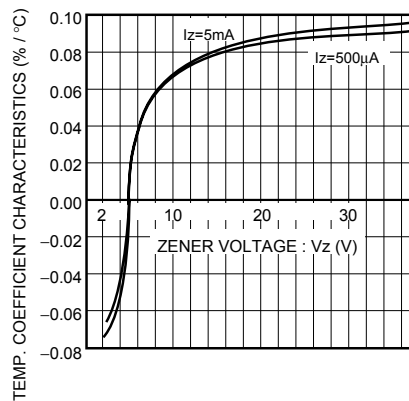
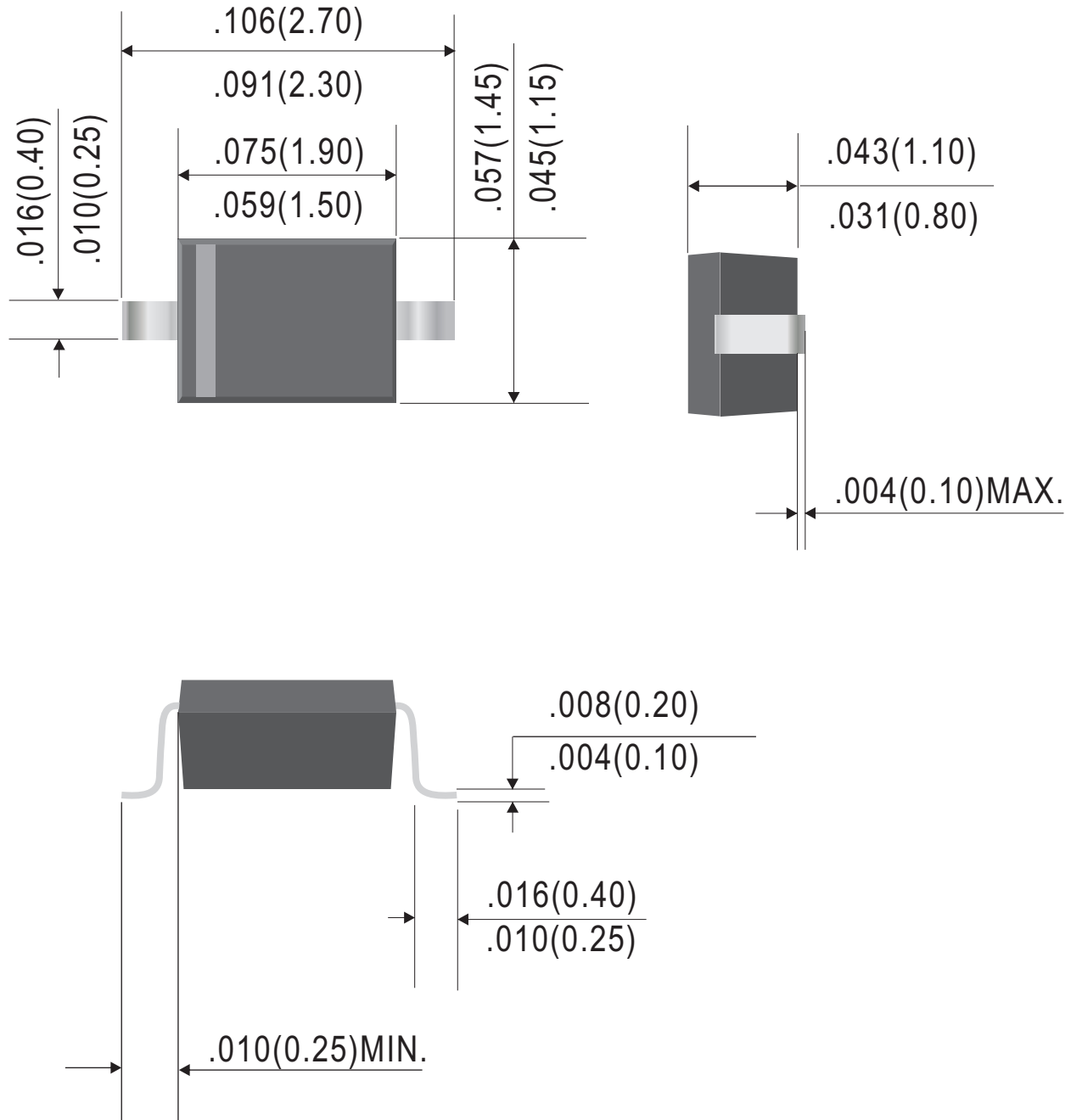


Fig.3 Zener voltage-temp.
coefficient characteristics



SOD-323



Dimensions in inches and (millimeters)

Ordering Information:

Device PN	Marking ⁽³⁾	Packing
Part Number G ⁽¹⁾ -WS ⁽²⁾	Page 1	Tape&Reel: 3 Kpcs/Reel

Note:

- (1) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.
- (2) Willas brand abbreviation, Label Type does not display.
- (3) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device.

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