



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Small Signal Zener Diodes



FEATURES

- Silicon planar Zener diodes
- Low Zener impedance and low leakage current
- Popular in Asian designs
- Compact surface mount device
- Ideal for automated mounting
- AEC-Q101 qualified available
- ESD capability according to AEC-Q101:
human body model > 8 kV
machine model > 800 V
- Base P/N-G3 - green, commercial grade
- Base P/N-HG3 - green, AEC-Q101 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



PRIMARY CHARACTERISTICS		
PARAMETER	VALUE	UNIT
V _Z range nom.	2.0 to 36	V
Test current I _{ZT}	5	mA
V _Z specification	Pulse current	
Int. construction	Single	

ORDERING INFORMATION			
DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL	MINIMUM ORDER QUANTITY
GDZ-G-series	GDZ2V0B-G3-08 to GDZ36B-G3-08	3000 (8 mm tape on 7" reel)	15 000/box
	GDZ2V0B-G3-18 to GDZ36B-G3-18	10 000 (8 mm tape on 13" reel)	10 000/box
	GDZ2V0B-HG3-08 to GDZ36B-HG3-08	3000 (8 mm tape on 7" reel)	15 000/box
	GDZ2V0B-HG3-18 to GDZ36B-HG3-18	10 000 (8 mm tape on 13" reel)	10 000/box

PACKAGE				
PACKAGE NAME	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
SOD-323	4 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	260 °C/10 s at terminals

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Power dissipation		P _{tot}	200	mW
Junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	-55 to +150	°C
Operating temperature range		T _{op}	-55 to +150	°C



ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)									
PART NUMBER	MARKING CODE	ZENER VOLTAGE RANGE		TEST CURRENT		REVERSE CURRENT		DYNAMIC RESISTANCE	
		V_Z at I_{ZT1}		I_{ZT1}	I_{ZT2}	I_R at V_R		Z_Z at I_{ZT1}	Z_{ZK} at I_{ZT2}
		V		mA		μA	V	Ω	
		MIN.	MAX.			MAX.		MAX.	MAX.
GDZ2V0B-G	05	2.02	2.2	5	0.5	120	0.5	100	1000
GDZ2V2B-G	15	2.22	2.41	5	0.5	120	0.7	100	1000
GDZ2V4B-G	25	2.43	2.63	5	0.5	120	1	100	1000
GDZ2V7B-G	35	2.69	2.91	5	0.5	100	1	110	1000
GDZ3V0B-G	45	3.01	3.22	5	0.5	50	1	120	1000
GDZ3V3B-G	55	3.32	3.53	5	0.5	20	1	120	1000
GDZ3V6B-G	65	3.6	3.845	5	1	10	1	100	1000
GDZ3V9B-G	75	3.89	4.16	5	1	5	1	100	1000
GDZ4V3B-G	85	4.17	4.43	5	1	5	1	100	1000
GDZ4V7B-G	95	4.55	4.75	5	0.5	2	1	100	800
GDZ5V1B-G	U1	4.98	5.2	5	0.5	2	1	80	500
GDZ5V6B-G	U2	5.49	5.73	5	0.5	1	2.5	60	200
GDZ6V2B-G	U3	6.06	6.33	5	0.5	1	3	60	100
GDZ6V8B-G	U4	6.65	6.93	5	0.5	0.5	3.5	40	60
GDZ7V5B-G	U5	7.28	7.6	5	0.5	0.5	4	30	60
GDZ8V2B-G	U6	8.02	8.36	5	0.5	0.5	5	30	60
GDZ9V1B-G	U7	8.85	9.23	5	0.5	0.5	6	30	60
GDZ10B-G	U8	9.77	10.21	5	0.5	0.1	7	30	60
GDZ11B-G	U9	10.76	11.22	5	0.5	0.1	8	30	60
GDZ12B-G	UA	11.74	12.24	5	0.5	0.1	9	30	80
GDZ13B-G	UB	12.91	13.49	5	0.5	0.1	10	37	80
GDZ15B-G	UC	14.34	14.98	5	0.5	0.1	11	42	80
GDZ16B-G	UD	15.85	16.51	5	0.5	0.1	12	50	80
GDZ18B-G	UE	17.56	18.35	5	0.5	0.1	13	65	80
GDZ20B-G	UH	19.52	20.39	5	0.5	0.1	15	85	100
GDZ22B-G	UK	21.54	22.47	5	0.5	0.1	17	100	100
GDZ24B-G	UL	23.72	24.78	5	0.5	0.1	19	120	120
GDZ27B-G	UM	26.19	27.53	5	0.5	0.1	21	150	150
GDZ30B-G	UN	29.19	30.69	5	0.5	0.1	23	200	200
GDZ33B-G	UP	32.15	33.79	5	0.5	0.1	25	250	250
GDZ36B-G	UT	35.07	36.87	5	0.5	0.1	27	300	300

Notes

- The Zener voltage V_Z is measured 40 ms after power is supplied
- The operating resistance (Z_Z , Z_{ZK}) are measured by superimposing a 1 kHz alternating current on the regulated current (I_Z).

TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

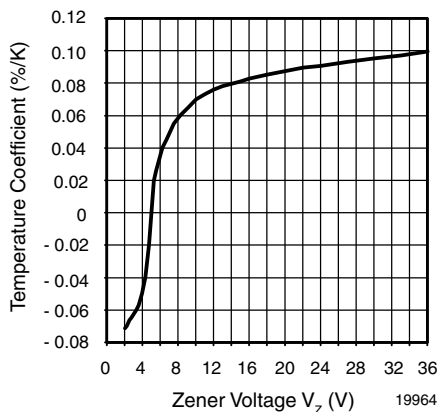
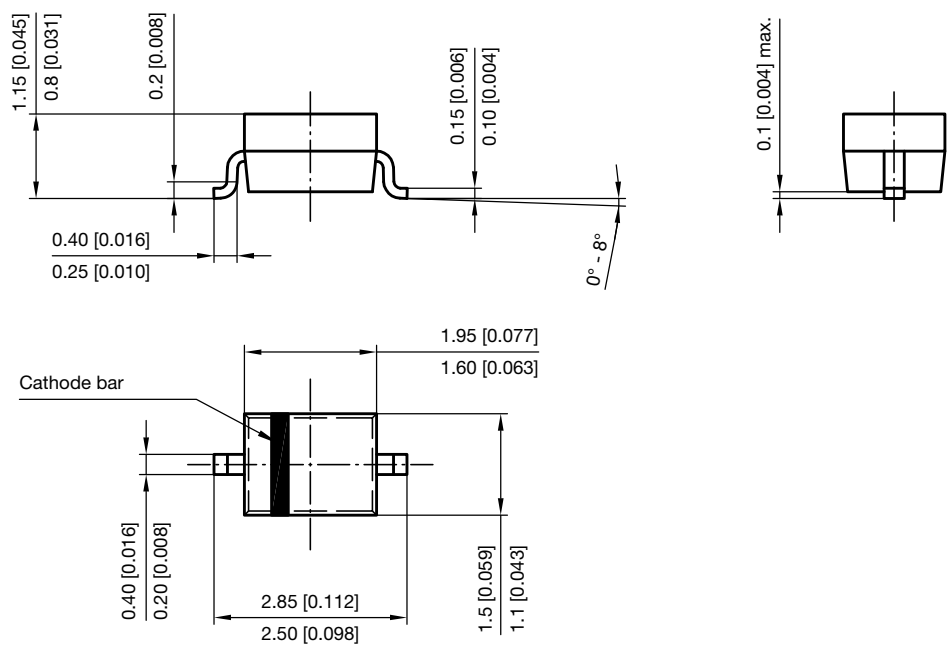


Fig. 1 - Zener Voltage Temperature Coefficient vs. Zener Voltage

PACKAGE DIMENSIONS in millimeters (inches): SOD-323



Footprint recommendation:

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