

GDZ-V-Series

Vishay Semiconductors

Small Signal Zener Diodes

Features

- Silicon planar power zener diodes
- Low zener impedence and low leakage current
- Popular in asian designs
- Compact surface mount device
- · Ideal for automated mounting
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Mechanical Data

Case: SOD-323 Weight: approx. 4.3 mg Packaging codes/options: GS18/10 k per 13" reel (8 mm tape), 10 k/box GS08/3 k per 7" reel (8 mm tape), 15 k/box

Absolute Maximum Ratings

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit	
Power dissipation		P _d	200	mW	

RoHS

COMPLIANT

Thermal Characteristics

 $T_{amb} = 25 \ ^{\circ}C$, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Junction temperature		Тj	150	°C
Storage temperature range		T _{stg}	- 55 to + 150	



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Electrical Characteristics

Marki	Marking	Zener voltage subdivision		Operating resistance	Rising operating resistance	Test current		Reverse current	
Part number	code	V_Z at I_{ZT1}	V_Z at I_{ZT1}	Z_Z at I_{ZT1}	Z_{ZK} at I_{ZT2}	I _{ZT1}	I _{ZT2}	I _R	at V _R
	V	V	Ω		mA	mA	μA	V	
		min.	max.	max .	max.				
GDZ2V0B-V	02	2.020	2.200	100	1000	5	0.5	120	0.5
GDZ2V2B-V	12	2.220	2.410	100	1000	5	0.5	120	0.7
GDZ2V4B-V	22	2.430	2.630	100	1000	5	0.5	120	1
GDZ2V7B-V	32	2.690	2.910	110	1000	5	0.5	100	1
GDZ3V0B-V	42	3.010	3.220	120	1000	5	0.5	50	1
GDZ3V3B-V	52	3.320	3.530	120	1000	5	0.5	20	1
GDZ3V6B-V	62	3.600	3.845	100	1000	5	1	10	1
GDZ3V9B-V	72	3.890	4.160	100	1000	5	1	5	1
GDZ4V3B-V	82	4.170	4.430	100	1000	5	1	5	1
GDZ4V7B-V	92	4.550	4.750	100	800	5	0.5	2	1
GDZ5V1B-V	T 1	4.980	5.200	80	500	5	0.5	2	1
GDZ5V6B-V	T 2	5.490	5.730	60	200	5	0.5	1	2.5
GDZ6V2B-V	Т 3	6.060	6.330	60	100	5	0.5	1	3
GDZ6V8B-V	Τ4	6.650	6.930	40	60	5	0.5	0.5	3.5
GDZ7V5B-V	T 5	7.280	7.600	30	60	5	0.5	0.5	4
GDZ8V2B-V	Τ6	8.020	8.360	30	60	5	0.5	0.5	5
GDZ9V1B-V	Τ7	8.850	9.230	30	60	5	0.5	0.5	6
GDZ10B-V	T 8	9.770	10.210	30	60	5	0.5	0.1	7
GDZ11B-V	Т9	10.760	11.220	30	60	5	0.5	0.1	8
GDZ12B-V	ΤА	11.740	12.240	30	80	5	0.5	0.1	9
GDZ13B-V	ΤВ	12.910	13.490	37	80	5	0.5	0.1	10
GDZ15B-V	тС	14.340	14.980	42	80	5	0.5	0.1	11
GDZ16B-V	ΤD	15.850	16.510	50	80	5	0.5	0.1	12
GDZ18B-V	ΤE	17.560	18.350	65	80	5	0.5	0.1	13
GDZ20B-V	ΤН	19.520	20.390	85	100	5	0.5	0.1	15
GDZ22B-V	ТΚ	21.540	22.470	100	100	5	0.5	0.1	17
GDZ24B-V	ΤL	23.720	24.780	120	120	5	0.5	0.1	19
GDZ27B-V	ТМ	26.190	27.530	150	150	5	0.5	0.1	21
GDZ30B-V	ΤN	29.190	30.690	200	200	5	0.5	0.1	23
GDZ33B-V	ТΡ	32.150	33.790	250	250	5	0.5	0.1	25
GDZ36B-V	ТТ	35.070	36.870	300	300	5	0.5	0.1	27

Notes:

(1) The zener voltage $V_{\left(Z\right) }$ is measured 40 ms after power is supplied.

(2) The operating resistance (Z_Z , Z_{ZK}) are measured by superimposing a 1 kHz alternating current on the regulated current (I_Z).



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Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)

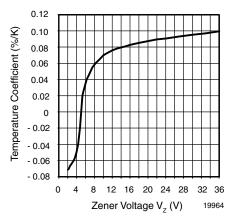
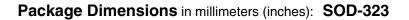
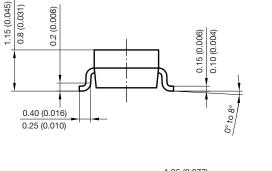
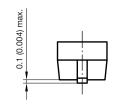
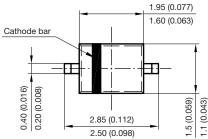


Figure 1. Zener Voltage Temperature Coefficient vs. Zener Voltage













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