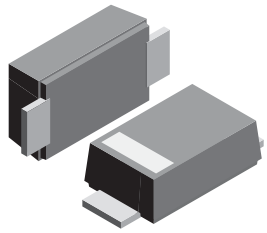
GDZ2V0B - GDZ36B

SURFACE MOUNT ZENER DIODES

VOLTAGE RANGE: 2.0 - 36V
POWER: 0.2Watts



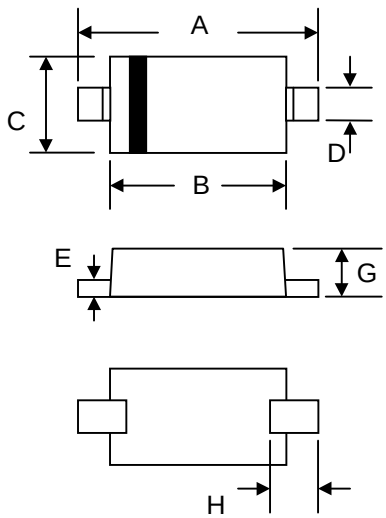
Features

- Complete voltage range 2.0 to 36 volts
- Silicon planar power Zener diodes
- Low Zener impedenceand low leakage current
- Popular in Asian designs
- Compact surface mount device
- Ideal for auto mated mounting

Mechanical Data

- Case: SOD-323, Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solderable per MIL-STD-202, Method 208
- Weight: 0.004 grams (approx.)

RoHS COMPLIANT



SOD-323		
Dim	**Min**	**Max**
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Maximum Ratings and Thermal Characteristics (Ta 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Test current I	I_{ZM}	5.0	mA
Power Dissipation at T_{amp} = 25 °C	P_{tot}	200(1)	Mw
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	650(2)	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_S	-65 to + 150	°C

Notes:

(1) Device on fiberglass substrate

(2) Valid provided that electrodes are ambient temperature

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

PART NUMBER	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.	NOM.	MAX.			MAX.		MAX.	MAX.
GDZ2V0B	2.02	2.0	2.2	5	0.5	120	0.5	100	1000
GDZ2V2B	2.22	2.2	2.41	5	0.5	120	0.7	100	1000
GDZ2V4B	2.43	2.4	2.63	5	0.5	120	1	100	1000
GDZ2V7B	2.69	2.7	2.91	5	0.5	100	1	110	1000
GDZ3V0B	3.01	3.0	3.22	5	0.5	50	1	120	1000
GDZ3V3B	3.32	3.3	3.53	5	0.5	20	1	120	1000
GDZ3V6B	3.6	3.6	3.845	5	1	10	1	100	1000
GDZ3V9B	3.89	3.9	4.16	5	1	5	1	100	1000
GDZ4V3B	4.17	4.3	4.43	5	1	5	1	100	1000
GDZ4V7B	4.55	4.7	4.75	5	0.5	2	1	100	800
GDZ5V1B	4.98	5.1	5.2	5	0.5	2	1	80	500
GDZ5V6B	5.49	5.6	5.73	5	0.5	1	2.5	60	200
GDZ6V2B	6.06	6.2	6.33	5	0.5	1	3	60	100
GDZ6V8B	6.65	6.8	6.93	5	0.5	0.5	3.5	40	60
GDZ7V5B	7.28	7.5	7.6	5	0.5	0.5	4	30	60
GDZ8V2B	8.02	8.2	8.36	5	0.5	0.5	5	30	60
GDZ9V1B	8.85	9.1	9.23	5	0.5	0.5	6	30	60
GDZ10B	9.77	10	10.21	5	0.5	0.1	7	30	60
GDZ11B	10.76	11	11.22	5	0.5	0.1	8	30	60
GDZ12B	11.74	12	12.24	5	0.5	0.1	9	30	80
GDZ13B	12.91	13	13.49	5	0.5	0.1	10	37	80
GDZ15B	14.34	15	14.98	5	0.5	0.1	11	42	80
GDZ16B	15.85	16	16.51	5	0.5	0.1	12	50	80
GDZ18B	17.56	18	18.35	5	0.5	0.1	13	65	80
GDZ20B	19.52	20	20.39	5	0.5	0.1	15	85	100
GDZ22B	21.54	22	22.47	5	0.5	0.1	17	100	100
GDZ24B	23.72	24	24.78	5	0.5	0.1	19	120	120
GDZ27B	26.19	27	27.53	5	0.5	0.1	21	150	150
GDZ30B	29.19	30	30.69	5	0.5	0.1	23	200	200
GDZ33B	32.15	33	33.79	5	0.5	0.1	25	250	250
GDZ36B	35.07	36	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).