

GSZ01LxxxD5F Series

Zener Diodes

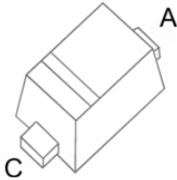
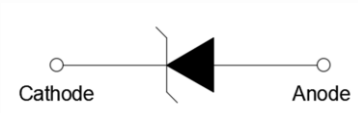
Product Description

Zener diode with 150mW power dissipation.

Features

- Wide Zener Voltage Range Selection, 1.8V to 43V
- SOD-523 Package
- Band Indicates Cathode End
- RoHS Compliant and Halogen Free

Packages & Pin Assignments

SOD-523	Equivalent Circuit
 *Band Indicates Cathode	

Ordering and Marking Information

Ordering Information															
Part Number	Package	Part Marking	Quantity / Reel												
GSZ01L□□□D5F	SOD-523	□□	8,000 PCS												
<table><tr><td>- Product Code: GSZ is Zener Diode</td><td>- Series Code: 01L is MMSZ4 Series</td><td colspan="2"></td></tr><tr><td>- Voltage Code: □□□, such as 2V4 is 2.4V and 40V is 40V etc.</td><td>- Package Code: D5 is SOD-523</td><td colspan="2"></td></tr><tr><td></td><td></td><td>- Green Level: F is RoHS Compliant and Halogen Free</td><td></td></tr></table>				- Product Code: GSZ is Zener Diode	- Series Code: 01L is MMSZ4 Series			- Voltage Code: □□□, such as 2V4 is 2.4V and 40V is 40V etc.	- Package Code: D5 is SOD-523					- Green Level: F is RoHS Compliant and Halogen Free	
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Absolute Maximum Ratings (T_A=25°C Unless Otherwise Specified)

Symbol	Parameter	Value	Unit
P _D	Power Dissipation ¹	150	mW
R _{θJA}	Thermal Resistance, Junction to Ambient	833	°C/W
T _J	Junction Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C
V _F	Maximum Forward Voltage @ I _F = 10 mA ²	0.9	V

NOTE:

1. Device mounted on 1 in² FR4 board with 2oz copper
2. Tested under pulse condition ≤ 1mS.

Electrical Characteristics (T_A=25°C Unless Otherwise Specified)

Part Number	Marking	V _Z (V) @ I _{ZT}			I _{ZT}	I _R max @	
		Min	Nom	Max		I _R	V _R
					μA	μA	V
GSZ01L1V8D5F	CC	1.71	1.8	1.89	50	7.5	1.0
GSZ01L2V0D5F	CD	1.90	2.0	2.10	50	5	1.0
GSZ01L2V2D5F	CE	2.09	2.2	2.31	50	4	1.0
GSZ01L2V4D5F	CF	2.28	2.4	2.52	50	2	1.0
GSZ01L2V7D5F	CH	2.56	2.7	2.83	50	1	1.0
GSZ01L3V0D5F	CJ	2.85	3.0	3.15	50	0.8	1.0
GSZ01L3V3D5F	CK	3.13	3.3	3.47	50	7.5	1.5
GSZ01L3V6D5F	CM	3.42	3.6	3.78	50	7.5	2.0
GSZ01L3V9D5F	CN	3.70	3.9	4.10	50	5	2.0
GSZ01L4V3D5F	CP	4.09	4.3	4.52	50	4	2.0
GSZ01L4V7D5F	CT	4.47	4.7	4.94	50	10	3.0
GSZ01L5V1D5F	CU	4.85	5.1	5.36	50	10	3.0
GSZ01L5V6D5F	CV	5.32	5.6	5.88	50	10	4.0
GSZ01L6V2D5F	CA	5.89	6.2	6.51	50	10	5.0
GSZ01L6V8D5F	CX	6.46	6.8	7.14	50	10	5.1
GSZ01L7V5D5F	CY	7.13	7.5	7.88	50	10	5.7
GSZ01L8V2D5F	CZ	7.79	8.2	8.61	50	1	6.2
GSZ01L8V7D5F	DC	8.27	8.7	9.14	50	1	6.6
GSZ01L9V1D5F	DD	8.65	9.1	9.56	50	1	6.9
GSZ01L10VD5F	DE	9.50	10	10.50	50	1	7.6
GSZ01L11VD5F	DF	10.45	11	11.55	50	0.05	8.4
GSZ01L12VD5F	DH	11.40	12	12.60	50	0.05	9.1
GSZ01L13VD5F	DJ	12.35	13	13.65	50	0.05	9.8
GSZ01L14VD5F	DK	13.30	14	14.70	50	0.05	10.6
GSZ01L15VD5F	DM	14.25	15	15.75	50	0.05	11.4
GSZ01L16VD5F	DN	15.20	16	16.80	50	0.05	12.1

GSZ01L17VD5F	DP	16.15	17	17.85	50	0.05	12.9
GSZ01L18VD5F	DT	17.10	18	18.90	50	0.05	13.6
GSZ01L19VD5F	DU	18.05	19	19.95	50	0.05	14.4
GSZ01L20VD5F	DV	19.00	20	21.00	50	0.01	15.2
GSZ01L22VD5F	DA	20.90	22	23.10	50	0.01	16.7
GSZ01L24VD5F	DX	22.80	24	25.20	50	0.01	18.2
GSZ01L25VD5F	DY	23.75	25	26.25	50	0.01	19.0
GSZ01L27VD5F	EA	25.65	27	28.35	50	0.01	20.4
GSZ01L28VD5F	EC	26.60	28	29.40	50	0.01	21.2
GSZ01L30VD5F	ED	28.50	30	31.50	50	0.01	22.8
GSZ01L33VD5F	EE	31.35	33	34.65	50	0.01	25.0
GSZ01L36VD5F	EF	34.20	36	37.80	50	0.01	27.3
GSZ01L39VD5F	EH	37.05	39	40.95	50	0.01	29.6
GSZ01L43VD5F	EJ	40.85	43	45.15	50	0.01	32.6

Typical Characteristics

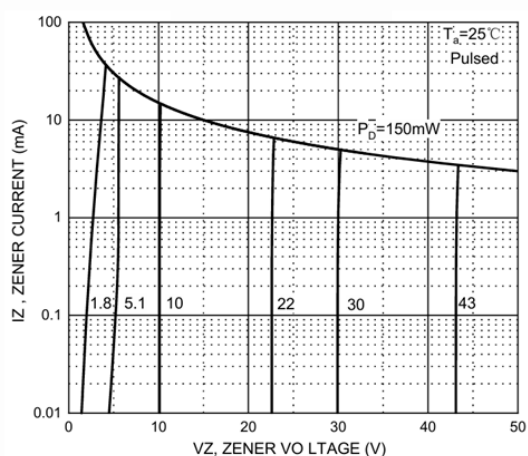


Figure 1. Zener Characteristics

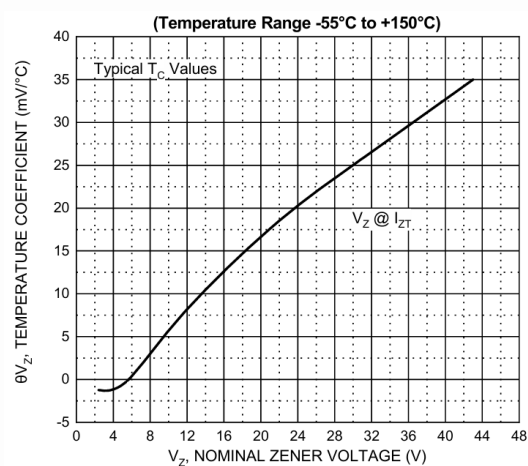


Figure 2. Temperature Coefficient of Zener Voltage

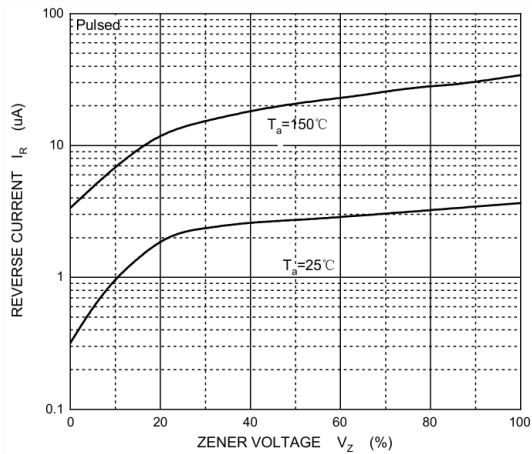


Figure 3. Reverse Characteristics

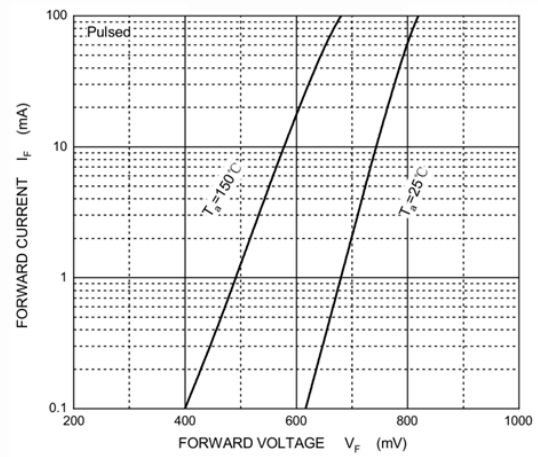


Figure 4. Forward Characteristics

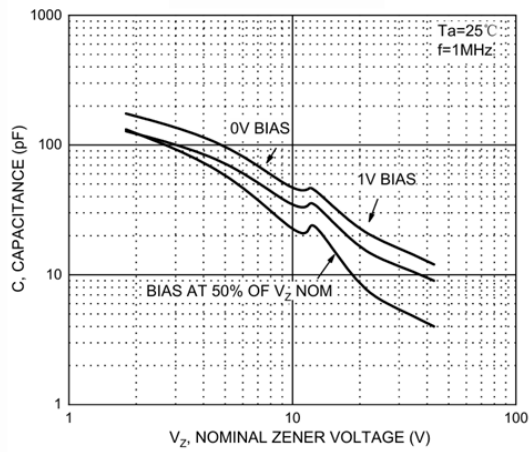


Figure 5. Typical Capacitance

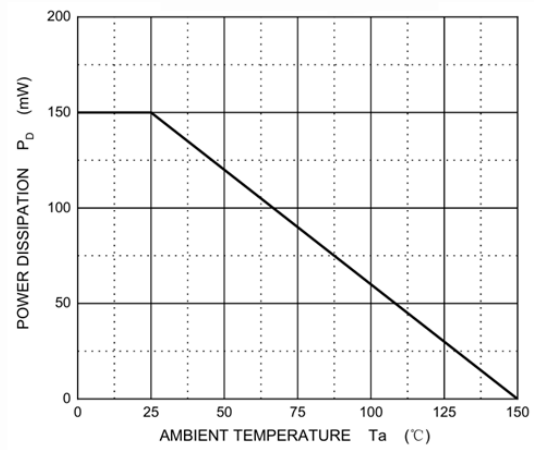
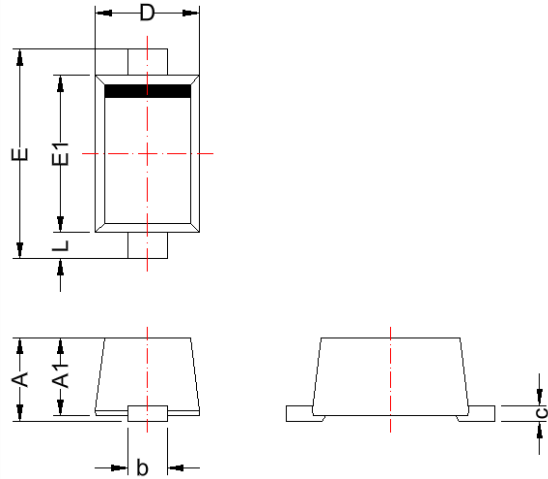


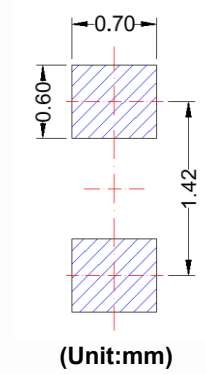
Figure 6. Forward Characteristics

SOD-523

Package Dimension



Recommended Land Pattern



Dimensions				
SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.51	0.77	0.020	0.030
A1	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
c	0.08	0.15	0.003	0.006
D	0.75	0.85	0.030	0.033
E	1.50	1.70	0.059	0.067
E1	1.10	1.300	0.043	0.051
L	0.20 REF		0.008 REF	

NOTE:
Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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