

GSZ□□□L05D2F Series

Zener Diodes

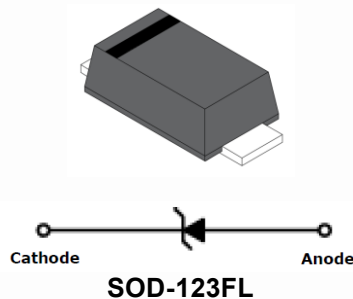
Product Description

Zener Voltage Regulators 500mW

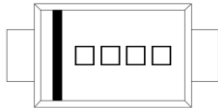
Features

- Zener Voltage Range 2.0V to 75V
- Tolerance of $\pm 5\%$
- SOD-123FL Package
- RoHS Compliant and Green EMC
- Band Indicates Cathode

Package and Symbol



Ordering and Marking Information

Ordering Information			
Part Number	Package	Part Marking	Quantity / Reel
GSZ□□□L05D2F	SOD-123FL	□□□□	3,000 PCS
- Product Code: GSZ is Zener Diode	- Voltage Code: □□□, such as 2V0 is 2.0V and 75V is 75V etc.	- Voltage Tolerance: L is 5%.	
- Series Code: 05 is MMSZ Series	- Package Code: D2 is SOD-123FL	- Green Level: F is RoHS Compliant and Halogen Free	
Marking Information			
		- □□□□ Device Marking please refer to the Electrical Characteristics Section	

Absolute Maximum Ratings (T_A=25°C Unless Otherwise Noted)

Symbol	Conditions	Value	Unit
P _D	Power Dissipation	500	mW
T _J	Max Junction Temperature	+150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C
V _F	Forward Voltage (I _F = 10mA)	0.9	V

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

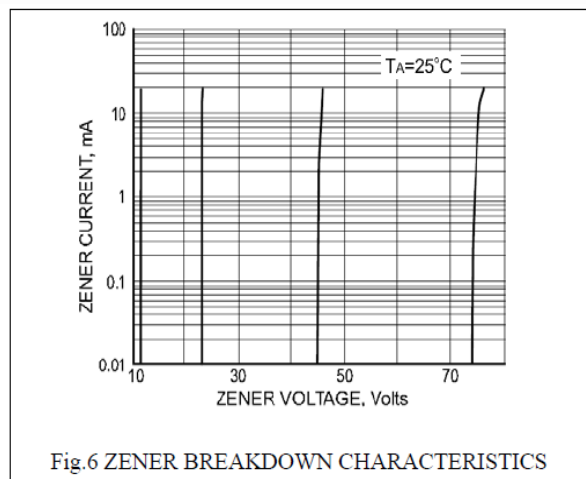
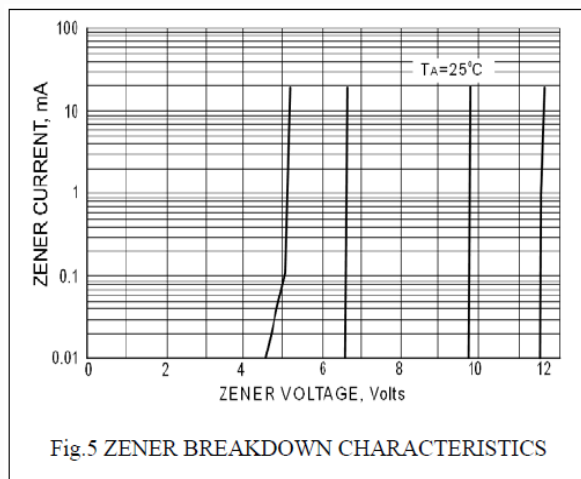
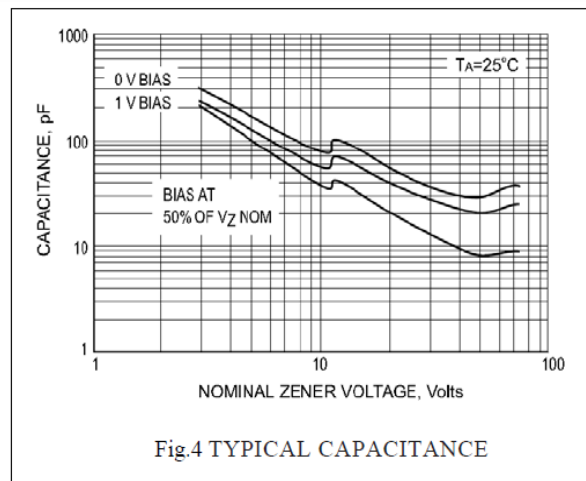
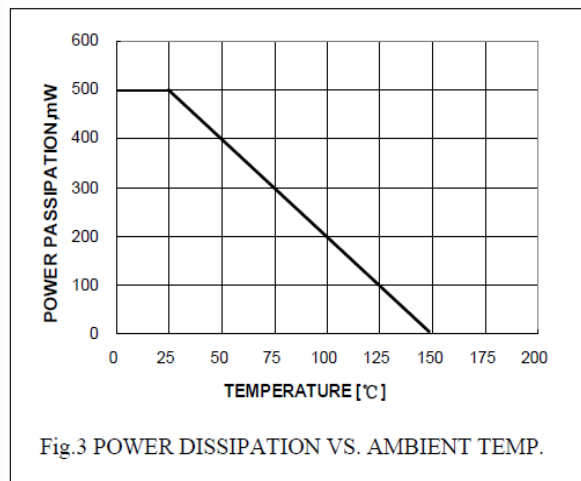
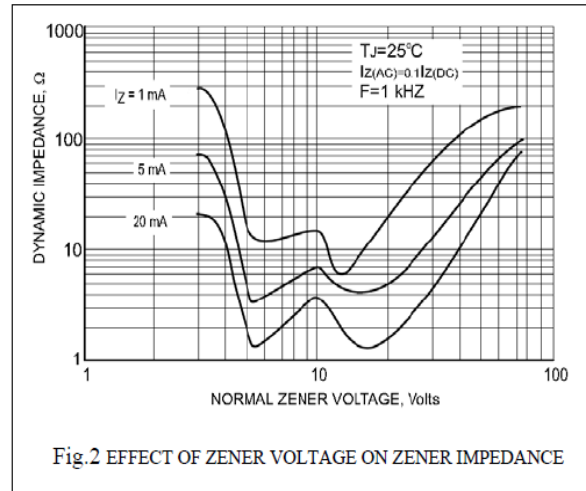
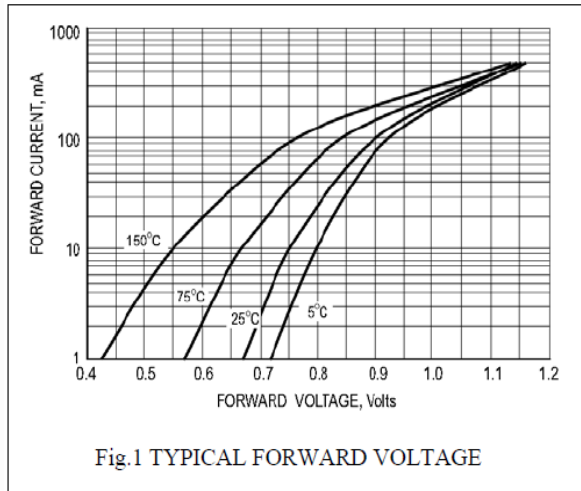
Device	Device Marking	V _Z (V)			Z _{YT} @ I _{ZT} Max		Z _{ZK} @ I _{ZK} Max		I _R @ V _R Max	
		Min	Nom	Max	Ω	mA	Ω	mA	uA	V
GSZ2V0L05D2F	2V0Z	1.90	2.0	2.10	100	5	564	1	120	0.5
GSZ2V2L05D2F	2V2Z	2.09	2.2	2.31	100	5	564	1	120	0.7
GSZ2V4L05D2F	2V4Z	2.28	2.4	2.52	100	5	564	1	45	1
GSZ2V7L05D2F	2V7Z	2.57	2.7	2.84	100	5	564	1	18	1
GSZ3V0L05D2F	3V0Z	2.85	3.0	3.15	100	5	564	1	9	1
GSZ3V3L05D2F	3V3Z	3.14	3.3	3.47	95	5	564	1	4.5	1
GSZ3V6L05D2F	3V6Z	3.42	3.6	3.78	90	5	564	1	4.5	1
GSZ3V9L05D2F	3V9Z	3.71	3.9	4.10	90	5	564	1	2.7	1
GSZ4V3L05D2F	4V3Z	4.09	4.3	4.52	90	5	564	1	2.7	1
GSZ4V7L05D2F	4V7Z	4.47	4.7	4.94	80	5	470	1	2.7	2
GSZ5V1L05D2F	5V1Z	4.85	5.1	5.36	60	5	451	1	1.8	2
GSZ5V6L05D2F	5V6Z	5.32	5.6	5.88	40	5	376	1	0.9	2
GSZ6V2L05D2F	6V2Z	5.89	6.2	6.51	10	5	141	1	2.7	4
GSZ6V8L05D2F	6V8Z	6.46	6.8	7.14	15	5	75	1	1.8	4
GSZ7V5L05D2F	7V5Z	7.11	7.5	7.86	15	5	75	1	0.9	5
GSZ8V2L05D2F	8V2Z	7.79	8.2	8.61	15	5	75	1	0.63	5
GSZ9V1L05D2F	9V1Z	8.65	9.1	9.56	15	5	94	1	0.45	6
GSZ10VL05D2F	10VZ	9.50	10	10.50	20	5	141	1	0.18	7
GSZ11VL05D2F	11VZ	10.45	11	11.55	20	5	141	1	0.09	8
GSZ12VL05D2F	12VZ	11.40	12	12.60	25	5	141	1	0.09	8
GSZ13VL05D2F	13VZ	12.35	13	13.65	30	5	160	1	0.09	8
GSZ15VL05D2F	15VZ	14.25	15	15.75	30	5	188	1	0.045	10.5
GSZ16VL05D2F	16VZ	15.20	16	16.80	40	5	188	1	0.045	11.2
GSZ18VL05D2F	18VZ	17.10	18	18.90	45	5	212	1	0.045	12.6
GSZ20VL05D2F	20VZ	19.00	20	21.00	55	5	212	1	0.045	14
GSZ22VL05D2F	22VZ	20.9	22	23.10	55	5	235	1	0.045	15.4
GSZ24VL05D2F	24VZ	22.8	24	25.20	70	5	235	1	0.045	16.8
GSZ27VL05D2F	27VZ	25.65	27	28.35	80	2	282	0.5	0.045	18.9
GSZ30VL05D2F	30VZ	28.5	30	31.50	80	2	282	0.5	0.045	21
GSZ33VL05D2F	33VZ	31.35	33	34.65	80	2	306	0.5	0.045	23
GSZ36VL05D2F	36VZ	34.20	36	37.80	90	2	329	0.5	0.045	25.2

Device	Device Marking	V _Z (V)			Z _{VT} @ I _{VT} Max		Z _{ZK} @ I _{ZK} Max		I _R @ V _R Max	
		Min	Nom	Max	Ω	mA	Ω	mA	uA	V
GSZ39VL05D2F	39VZ	37.05	39	40.95	130	2	329	0.5	0.045	27.3
GSZ43VL05D2F	43VZ	40.85	43	45.15	150	2	353	0.5	0.045	30.1
GSZ47VL05D2F	47VZ	44.65	47	49.35	170	2	353	0.5	0.045	33
GSZ51VL05D2F	51VZ	48.45	51	53.55	180	2	376	0.5	0.045	35.7
GSZ56VL05D2F	56VZ	52	56	58.80	200	2	400	0.5	0.045	39.2
GSZ62VL05D2F	62VZ	58.90	62	65.10	215	2	423	0.5	0.045	43.4
GSZ68VL05D2F	68VZ	64.60	68	71.40	240	2	447	0.5	0.045	47.6
GSZ75VL05D2F	75VZ	71.25	75	78.75	255	2	470	0.5	0.045	52.5

Note:

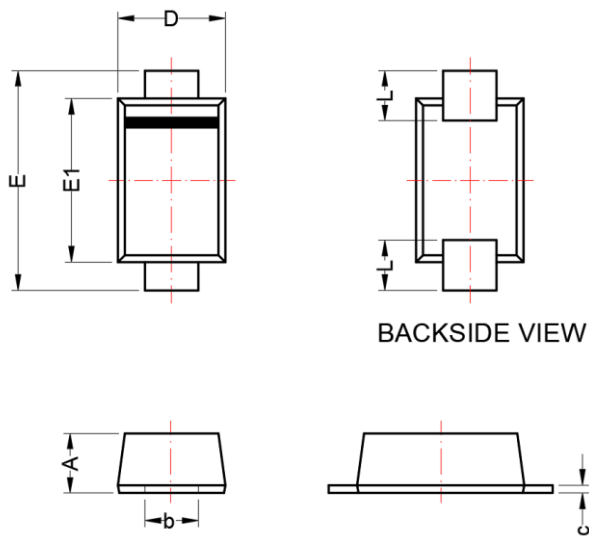
1. V_F Forward Voltage = 900mV Maximum @ I_F = 10 mA for all types
2. The Zener Voltage(V_Z) is tested under pulse condition of 10mS
3. The device numbers listed have a standard tolerance on the nominal Zener voltage of ±5%.

Typical Characteristics

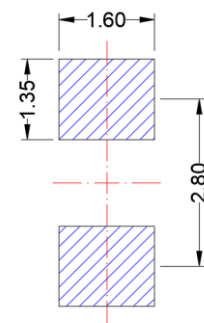


SOD-123FL

Package Dimension



Recommended Land Pattern



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.10	0.031	0.043
b	0.50	1.20	0.020	0.047
D	1.50	1.90	0.059	0.075
E	3.30	3.80	0.130	0.150
E1	2.45	2.75	0.096	0.108
c	0.05	0.20	0.002	0.008
L	0.70	0.90	0.028	0.035

NOTICE

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CONTACT US

GS Headquarter	
	4F.,No.43-1,Lane11,Sec.6,Minquan E.Rd Neihsu District Taipei City 114, Taiwan (R.O.C)
	886-2-2657-9980
	886-2-2657-3630
	sales_twn@gs-power.com

RD Division	
	824 Bolton Drive Milpitas. CA. 95035
	1-408-457-0587