



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.

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Small Signal Zener Diodes



FEATURES

- Silicon planar Zener diodes
- Standard Zener voltage tolerance is $\pm 5\%$
- High temperature soldering guaranteed: 260 °C/4 x 10 s set terminals
- AEC-Q101 qualified
- ESD capability according to AEC-Q101: Human body model > 8 kV Machine model > 800 V
- Base P/N-G3 - green, commercial grade
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



PRIMARY CHARACTERISTICS		
PARAMETER	VALUE	UNIT
V _Z range nom.	2.4 to 43	V
Test current I _{ZT}	0.05	mA
V _Z specification	Thermal equilibrium	
Int. construction	Single	

ORDERING INFORMATION			
DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL	MINIMUM ORDER QUANTITY
MMSZ4681-G to MMSZ4717-G	MMSZ4681-G3 to MMSZ4717-G3-series-08	3000 (8 mm tape on 7" reel)	15 000/box
	MMSZ4681-G3 to MMSZ4717-G3-series-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-123	9.4 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	T _L = 75 °C, on FR - 4 or FR - 5 board with minimum recommended solder pad layout	P _{tot}	500	mW	
Zener current (see table "Characteristics")					
Thermal resistance junction to ambient air	On FR - 4 or FR - 5 board with minimum recommended solder pad layout	R _{thJA}	340	K/W	
Junction temperature		T _j	150	°C	
Storage temperature range		T _{stg}	- 55 to + 150	°C	
Operating temperature range		T _{op}	- 55 to + 150	°C	



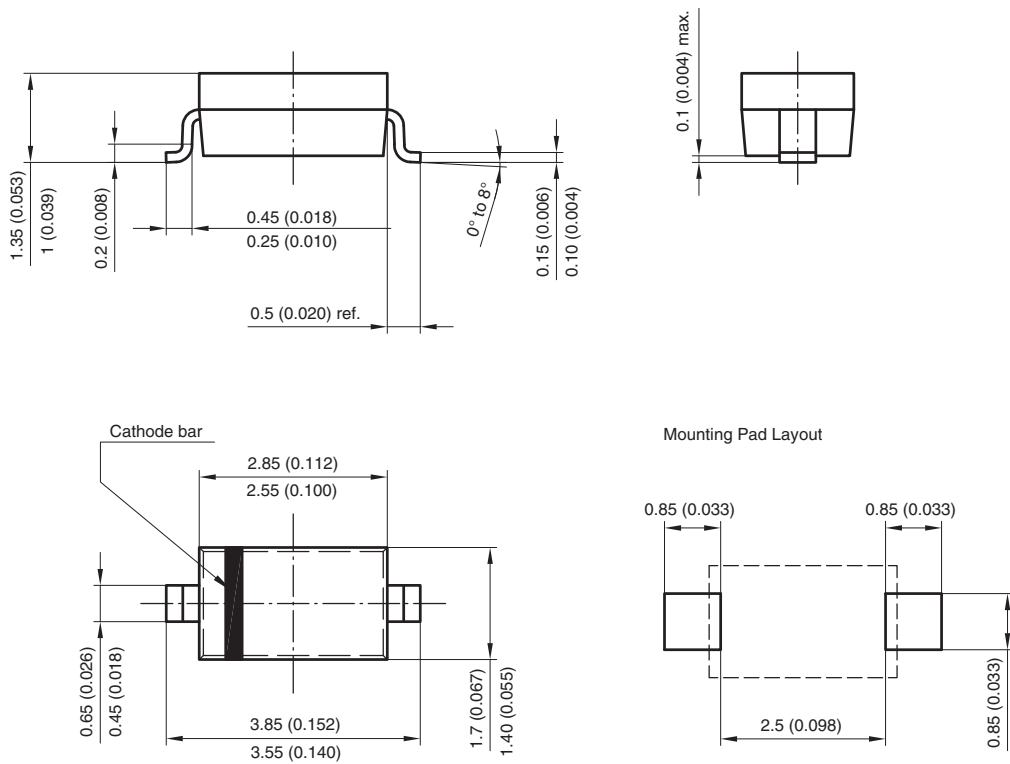
ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)							
PART NUMBER	MARKING CODE	ZENER VOLTAGE RANGE ⁽¹⁾			TEST CURRENT	REVERSE CURRENT	
		V_Z at I_{ZT1}			I_{ZT1}	I_R at V_R	
		V			mA	μA	V
		MIN.	NOM.	MAX.		MAX.	
MMSZ4681-G	TF	2.28	2.4	2.52	0.05	2	1
MMSZ4682-G	TH	2.57	2.7	2.84	0.05	1	1
MMSZ4683-G	TJ	2.85	3	3.15	0.05	0.8	1
MMSZ4684-G	TK	3.14	3.3	3.47	0.05	7.5	1.5
MMSZ4685-G	TM	3.42	3.6	3.78	0.05	7.5	2
MMSZ4686-G	TN	3.71	3.9	4.1	0.05	5	2
MMSZ4687-G	TP	4.09	4.3	4.52	0.05	4	2
MMSZ4688-G	TT	4.47	4.7	4.94	0.05	10	3
MMSZ4689-G	TU	4.85	5.1	5.36	0.05	10	3
MMSZ4690-G	TV	5.32	5.6	5.88	0.05	10	4
MMSZ4691-G	TA	5.89	6.2	6.51	0.05	10	5
MMSZ4692-G	TX	6.46	6.8	7.14	0.05	10	5.1
MMSZ4693-G	TY	7.13	7.5	7.88	0.05	10	5.7
MMSZ4694-G	TZ	7.79	8.2	8.61	0.05	1	6.2
MMSZ4695-G	UC	8.27	8.7	9.14	0.05	1	6.6
MMSZ4696-G	UD	8.65	9.1	9.56	0.05	1	6.9
MMSZ4697-G	UE	9.5	10	10.5	0.05	1	7.6
MMSZ4698-G	UF	10.5	11	11.6	0.05	0.05	8.4
MMSZ4699-G	UH	11.4	12	12.6	0.05	0.05	9.1
MMSZ4700-G	UJ	12.4	13	13.7	0.05	0.05	9.8
MMSZ4701-G	UK	13.3	14	14.7	0.05	0.05	10.6
MMSZ4702-G	UM	14.3	15	15.8	0.05	0.05	11.4
MMSZ4703-G	UN	15.2	16	16.8	0.05	0.05	12.1
MMSZ4704-G	UP	16.2	17	17.9	0.05	0.05	12.9
MMSZ4705-G	UT	17.1	18	18.9	0.05	0.05	13.6
MMSZ4706-G	UU	18.1	19	20	0.05	0.05	14.4
MMSZ4707-G	UV	19	20	21	0.05	0.01	15.2
MMSZ4708-G	UA	20.9	22	23.1	0.05	0.01	16.7
MMSZ4709-G	UZ	22.8	24	25.2	0.05	0.01	18.2
MMSZ4710-G	UY	23.8	25	26.3	0.05	0.01	19
MMSZ4711-G	ZA	25.7	27	28.4	0.05	0.01	20.4
MMSZ4712-G	ZC	26.6	28	29.4	0.05	0.01	21.2
MMSZ4713-G	ZD	28.5	30	31.5	0.05	0.01	22.8
MMSZ4714-G	ZE	31.4	33	34.7	0.05	0.01	25
MMSZ4715-G	ZF	34.2	36	37.8	0.05	0.01	27.3
MMSZ4716-G	ZH	37.1	39	41	0.05	0.01	29.6
MMSZ4717-G	ZJ	40.9	43	45.2	0.05	0.01	32.6

Notes

- Maximum $V_F = 0.9\text{ V}$ at $I_F = 10\text{ mA}$
- (1) Measured with device junction in thermal equilibrium



PACKAGE DIMENSIONS in millimeters (inches): SOD-123



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