

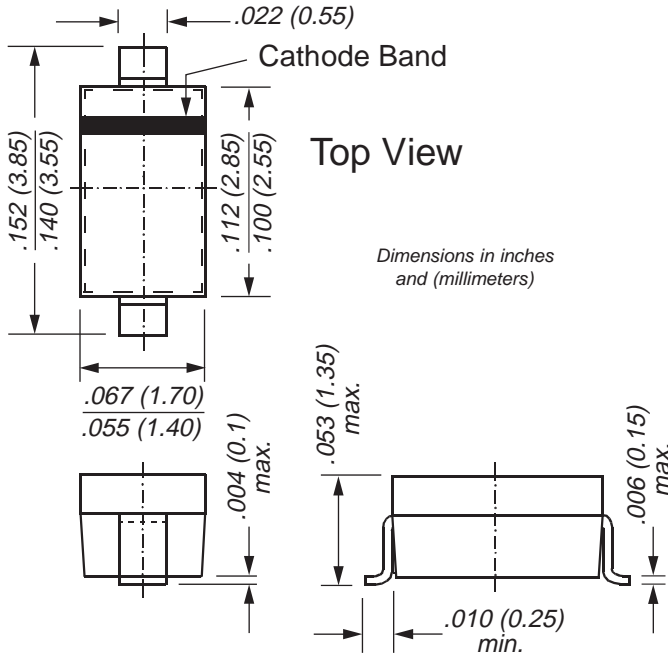


## Zener Diodes

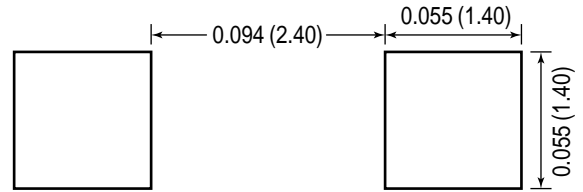
V<sub>z</sub> Range 2.4 to 43V  
Power Dissipation 500mW



SOD-123



Mounting Pad Layout



### Mechanical Data

**Case:** SOD-123 Plastic Case

**Weight:** approx. 0.01 grams

**Packaging codes/options:**

- D3/10K per 13" reel (8mm tape), 30K/box
- D4/3K per 7" reel (8mm tape), 30K/box

### Features

- Silicon Planar Zener Diodes.
- Standard Zener voltage tolerance is  $\pm 5\%$ . Other tolerances are available upon request.
- High temperature soldering guaranteed: 250°C/10 seconds set terminals.
- These diodes are also available in DO-35 case with the type designation 1N4681...1N4717 and SOT-23 case with the type designation MMBZ4681... MMBZ4717.

### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Zener Current (see Table "Characteristics")			
Power Dissipation at T <sub>L</sub> = 75°C	P <sub>tot</sub>	500 <sup>(1)</sup>	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	340 <sup>(1)</sup>	°C/W
Maximum Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>s</sub>	-55 to +150	°C

**Notes:**

(1) On FR-4 or FR-5 board with minimum recommended solder pad layout.

# MMSZ4681 thru MMSZ4717



Vishay Semiconductors  
formerly General Semiconductor

## Electrical Characteristics (T<sub>J</sub> = 25°C unless otherwise noted) Maximum V<sub>F</sub> = 0.9 V at I<sub>F</sub> = 10 mA

Type	Marking Code	Zener Voltage <sup>(1)</sup> V <sub>Z</sub> @ I <sub>ZT</sub> = 50 μA (Volts)			Max Reverse Current I <sub>R</sub> (μA)	Test Voltage V <sub>R</sub> (Volts)
		Nominal	Min	Max		
MMSZ4681	CF	2.4	2.28	2.52	2.00	1.0
MMSZ4682	CH	2.7	2.57	2.84	1.00	1.0
MMSZ4683	CJ	3.0	2.85	3.15	0.80	1.0
MMSZ4684	CK	3.3	3.14	3.47	7.50	1.5
MMSZ4685	CM	3.6	3.42	3.78	7.50	2.0
MMSZ4686	CN	3.9	3.71	4.10	5.00	2.0
MMSZ4687	CP	4.3	4.09	4.52	4.00	2.0
MMSZ4688	CT	4.7	4.47	4.94	10.0	3.0
MMSZ4689	CU	5.1	4.85	5.36	10.0	3.0
MMSZ4690	CV	5.6	5.32	5.88	10.0	4.0
MMSZ4691	CA	6.2	5.89	6.51	10.0	5.0
MMSZ4692	CX	6.8	6.46	7.14	10.0	5.1
MMSZ4693	CY	7.5	7.13	7.88	10.0	5.7
MMSZ4694	CZ	8.2	7.79	8.61	1.00	6.2
MMSZ4695	DC	8.7	8.27	9.14	1.00	6.6
MMSZ4696	DD	9.1	8.65	9.56	1.00	6.9
MMSZ4697	DE	10.0	9.50	10.5	1.00	7.6
MMSZ4698	DF	11.0	10.5	11.6	0.05	8.4
MMSZ4699	DH	12.0	11.4	12.6	0.05	9.1
MMSZ4700	DJ	13.0	12.4	13.7	0.05	9.8
MMSZ4701	DK	14.0	13.3	14.7	0.05	10.6
MMSZ4702	DM	15.0	14.3	15.8	0.05	11.4
MMSZ4703	DN	16.0	15.2	16.8	0.05	12.1
MMSZ4704	DP	17.0	16.2	17.9	0.05	12.9
MMSZ4705	DT	18.0	17.1	18.9	0.05	13.6
MMSZ4706	DU	19.0	18.1	20.0	0.05	14.4
MMSZ4707	DV	20.0	19.0	21.0	0.01	15.2
MMSZ4708	DA	22.0	20.9	23.1	0.01	16.7
MMSZ4709	DZ	24.0	22.8	25.2	0.01	18.2
MMSZ4710	DY	25.0	23.8	26.3	0.01	19.0
MMSZ4711	EA	27.0	25.7	28.4	0.01	20.4
MMSZ4712	EC	28.0	26.6	29.4	0.01	21.2
MMSZ4713	ED	30.0	28.5	31.5	0.01	22.8
MMSZ4714	EE	33.0	31.4	34.7	0.01	25.0
MMSZ4715	EF	36.0	34.2	37.8	0.01	27.3
MMSZ4716	EH	39.0	37.1	41.0	0.01	29.6
MMSZ4717	EJ	43.0	40.9	45.2	0.01	32.6

### Notes:

(1) Measured with device junction in thermal equilibrium