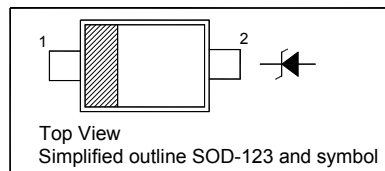


SILICON PLANAR ZENER DIODES
Features

- Total power dissipation: Max. 375 mW
- Small plastic package suitable for surface mounted design
- Tolerance approximately $\pm 5\%$
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	375	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

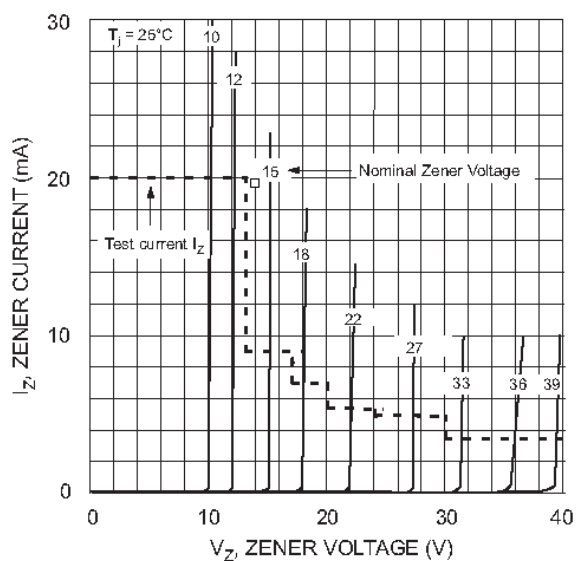
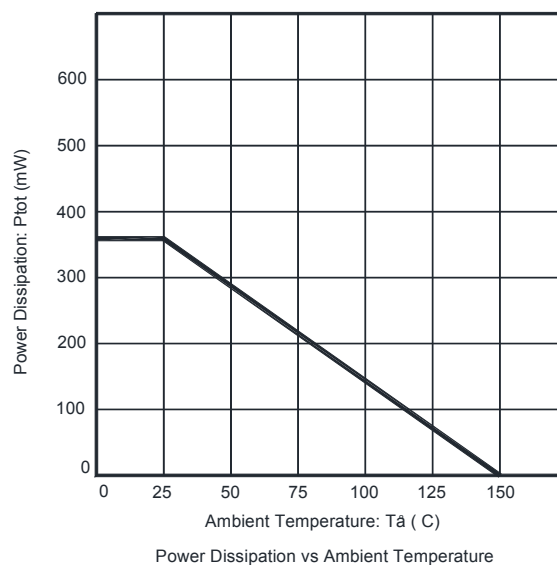
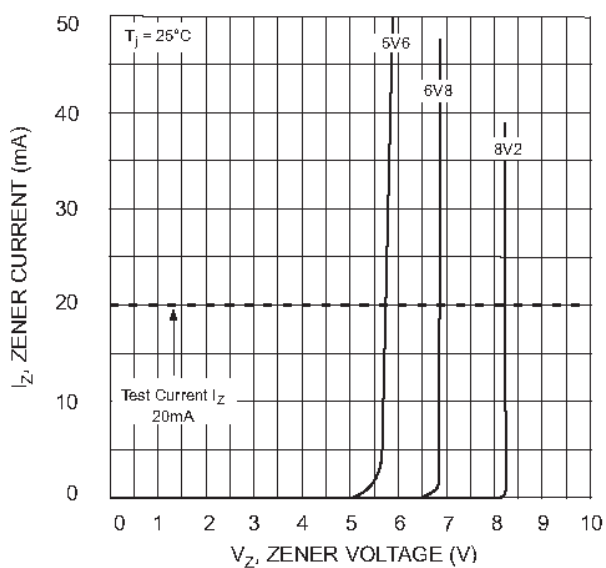
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta\text{JA}}$	330	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10 \text{ mA}$	V_F	0.9	V

Characteristics at $T_a = 25^{\circ}\text{C}$

Type	Marking Code	Zener Voltage Range ¹⁾				Dynamic Impedance ²⁾				Reverse Current	
		V_{znom}	V_{ZT}		at I_{ZT}	Z_{ZT}	at I_{ZT}	Z_{ZK}	at I_{ZK}	I_R	at V_R
		V	Min. (v)	Max.(v)	(mA)	Max. (Ω)	(mA)	Max. (Ω)	(mA)	Max.(μA)	(V)
MM1ZS5221B	A4	2.4	2.28	2.52	20	30	20	1200	0.25	100	1
MM1ZS5223B	B4	2.7	2.57	2.84	20	30	20	1300	0.25	75	1
MM1ZS5225B	C4	3.0	2.85	3.15	20	29	20	1600	0.25	50	1
MM1ZS5226B	D4	3.3	3.14	3.47	20	28	20	1600	0.25	25	1
MM1ZS5227B	E4	3.6	3.42	3.78	20	24	20	1700	0.25	15	1
MM1ZS5228B	F4	3.9	3.71	4.1	20	23	20	1900	0.25	10	1
MM1ZS5229B	H4	4.3	4.09	4.52	20	22	20	2000	0.25	5	1
MM1ZS5230BX	J4	4.7	4.47	4.94	20	19	20	1900	0.25	5	2
MM1ZS5231B	K4	5.1	4.85	5.36	20	17	20	1600	0.25	5	2
MM1ZS5232B	M4	5.6	5.32	5.88	20	11	20	1600	0.25	5	3
MM1ZS5234B	N4	6.2	5.89	6.51	20	7	20	1000	0.25	5	4
MM1ZS5235B	P4	6.8	6.46	7.14	20	5	20	750	0.25	3	5
MM1ZS5236B	R4	7.5	7.13	7.88	20	6	20	500	0.25	3	6
MM1ZS5237B	X4	8.2	7.79	8.61	20	8	20	500	0.25	3	6.5
MM1ZS5239B	Y4	9.1	8.65	9.56	20	10	20	600	0.25	3	7
MM1ZS5240B	Z4	10	9.50	10.5	20	17	20	600	0.25	3	8
MM1ZS5241B	A5	11	10.45	11.55	20	22	20	600	0.25	2	8.4
MM1ZS5242B	B5	12	11.40	12.6	20	30	20	600	0.25	1	9.1
MM1ZS5243B	C5	13	12.35	13.65	9.5	13	9.5	600	0.25	0.5	9.9
MM1ZS5245B	D5	15	14.25	15.75	8.5	16	8.5	600	0.25	0.1	11
MM1ZS5246B	E5	16	15.20	16.8	7.8	17	7.8	600	0.25	0.1	12
MM1ZS5247B	G5	17	16.15	17.85	7.4	19	7.4	600	0.25	0.1	13
MM1ZS5248B	F5	18	17.10	18.9	7	21	7	600	0.25	0.1	14
MM1ZS5249B	K9	19	18.05	19.95	6.6	23	6.6	600	0.25	0.1	14
MM1ZS5250B	H5	20	19.00	21	6.2	25	6.2	600	0.25	0.1	15
MM1ZS5251B	J5	22	20.90	23.1	5.6	29	5.6	600	0.25	0.1	17
MM1ZS5252B	K5	24	22.80	25.2	5.2	33	5.2	600	0.25	0.1	18
MM1ZS5253B	M9	25	23.75	26.25	5	35	5	600	0.25	0.1	19
MM1ZS5254B	M5	27	25.65	28.35	4.6	41	4.6	600	0.25	0.1	21
MM1ZS5256B	N5	30	28.50	31.5	4.2	49	4.2	600	0.25	0.1	23
MM1ZS5257B	P5	33	31.35	34.65	3.8	58	3.8	700	0.25	0.1	25
MM1ZS5258B	R5	36	34.20	37.8	3.4	70	3.4	700	0.25	0.1	27
MM1ZS5259B	X5	39	37.05	40.95	3.2	80	3.2	800	0.25	0.1	30
MM1ZS5260B	Y5	43	40.85	45.15	3	93	3	900	0.25	0.1	33
MM1ZS5261B	Z5	47	44.65	49.35	2.7	105	2.7	1000	0.25	0.1	36
MM1ZS5262B	A6	51	48.45	53.55	2.5	125	2.5	1100	0.25	0.1	39
MM1ZS5263B	B6	56	53.20	58.8	2.2	150	2.2	1300	0.25	0.1	43
MM1ZS5265B	C6	62	58.90	65.1	2	185	2	1400	0.25	0.1	47
MM1ZS5266B	D6	68	64.60	71.4	1.8	230	1.8	1600	0.25	0.1	52
MM1ZS5267B	E6	75	71.25	78.75	1.7	270	1.7	1700	0.25	0.1	56

¹⁾ V_{ZT} is tested with pulses (20 ms)

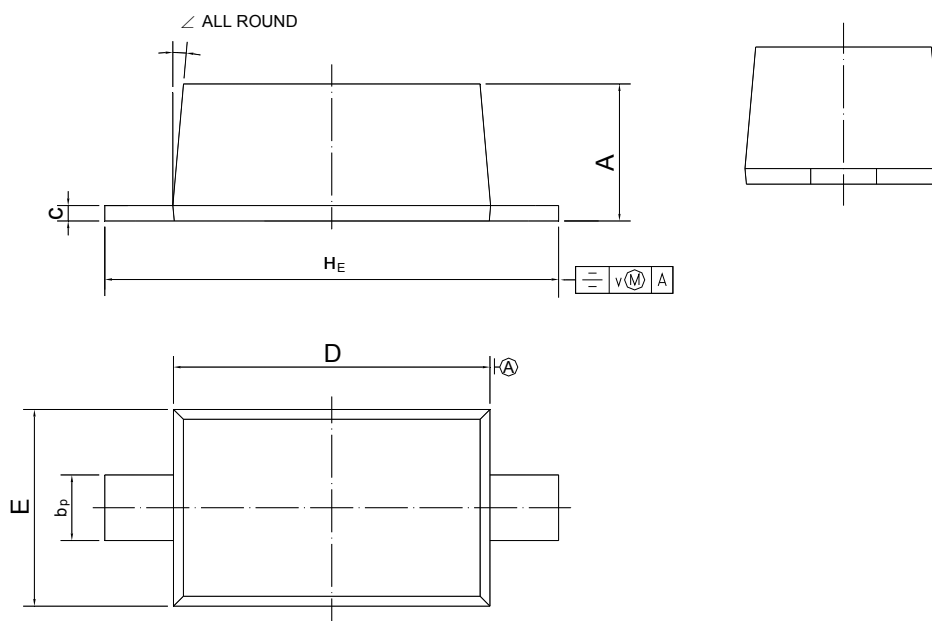
²⁾ Z_{ZT} and Z_{ZK} are measured by dividing the AC voltage drop across the device by the AC current applied. The specified limits are for $I_{Z(AC)} = 0.1 I_{Z(DC)}$ with the AC frequency = 1 KHz.



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°

Recommended Soldering Footprint

