



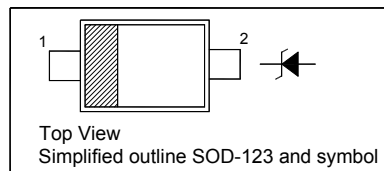
SILICON PLANAR ZENER DIODES

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

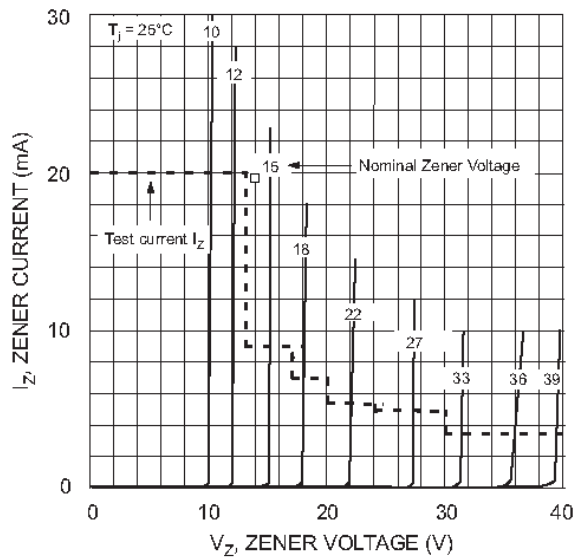
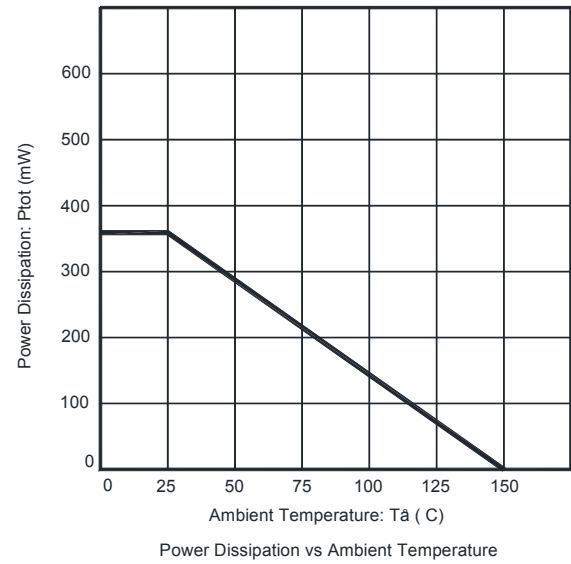
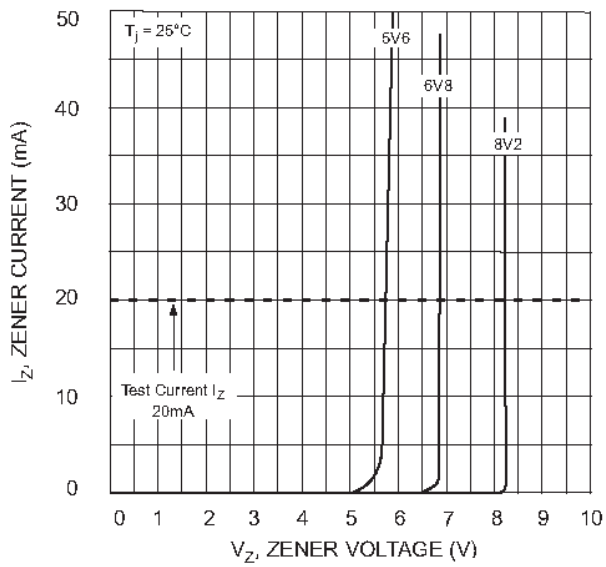
Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta\text{JA}}$	330	$^\circ\text{C/W}$
Forward Voltage at $I_F = 10 \text{ mA}$	V_F	0.9	V

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)
MM1ZS5221BX	A4	2.4	2.28	2.52	20	30	20	1200	0.25	100	1
MM1ZS5223BX	B4	2.7	2.57	2.84	20	30	20	1300	0.25	75	1
MM1ZS5225BX	C4	3.0	2.85	3.15	20	29	20	1600	0.25	50	1
MM1ZS5226BX	D4	3.3	3.14	3.47	20	28	20	1600	0.25	25	1
MM1ZS5227BX	E4	3.6	3.42	3.78	20	24	20	1700	0.25	15	1
MM1ZS5228BX	F4	3.9	3.71	4.1	20	23	20	1900	0.25	10	1
MM1ZS5229BX	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
MM1ZS5231BX	K4	5.1	4.85	5.36	20	17	20	1600	0.25	5	2
MM1ZS5232BX	M4	5.6	5.32	5.88	20	11	20	1600	0.25	5	3
MM1ZS5234BX	N4	6.2	5.89	6.51	20	7	20	1000	0.25	5	4
MM1ZS5235BX	P4	6.8	6.46	7.14	20	5	20	750	0.25	3	5
MM1ZS5236BX	R4	7.5	7.13	7.88	20	6	20	500	0.25	3	6
MM1ZS5237BX	X4	8.2	7.79	8.61	20	8	20	500	0.25	3	6.5
MM1ZS5239BX	Y4	9.1	8.65	9.56	20	10	20	600	0.25	3	7
MM1ZS5240BX	Z4	10	9.50	10.5	20	17	20	600	0.25	3	8
MM1ZS5241BX	A5	11	10.45	11.55	20	22	20	600	0.25	2	8.4
MM1ZS5242BX	B5	12	11.40	12.6	20	30	20	600	0.25	1	9.1
MM1ZS5243BX	C5	13	12.35	13.65	9.5	13	9.5	600	0.25	0.5	9.9
MM1ZS5245BX	D5	15	14.25	15.75	8.5	16	8.5	600	0.25	0.1	11
MM1ZS5246BX	E5	16	15.20	16.8	7.8	17	7.8	600	0.25	0.1	12
MM1ZS5247BX	G5	17	16.15	17.85	7.4	19	7.4	600	0.25	0.1	13
MM1ZS5248BX	F5	18	17.10	18.9	7	21	7	600	0.25	0.1	14
MM1ZS5249BX	K9	19	18.05	19.95	6.6	23	6.6	600	0.25	0.1	14
MM1ZS5250BX	H5	20	19.00	21	6.2	25	6.2	600	0.25	0.1	15
MM1ZS5251BX	J5	22	20.90	23.1	5.6	29	5.6	600	0.25	0.1	17
MM1ZS5252BX	K5	24	22.80	25.2	5.2	33	5.2	600	0.25	0.1	18
MM1ZS5253BX	M9	25	23.75	26.25	5	35	5	600	0.25	0.1	19
MM1ZS5254BX	M5	27	25.65	28.35	4.6	41	4.6	600	0.25	0.1	21
MM1ZS5256BX	N5	30	28.50	31.5	4.2	49	4.2	600	0.25	0.1	23
MM1ZS5257BX	P5	33	31.35	34.65	3.8	58	3.8	700	0.25	0.1	25
MM1ZS5258BX	R5	36	34.20	37.8	3.4	70	3.4	700	0.25	0.1	27
MM1ZS5259BX	X5	39	37.05	40.95	3.2	80	3.2	800	0.25	0.1	30
MM1ZS5260BX	Y5	43	40.85	45.15	3	93	3	900	0.25	0.1	33
MM1ZS5261BX	Z5	47	44.65	49.35	2.7	105	2.7	1000	0.25	0.1	36
MM1ZS5262BX	A6	51	48.45	53.55	2.5	125	2.5	1100	0.25	0.1	39
MM1ZS5263BX	B6	56	53.20	58.8	2.2	150	2.2	1300	0.25	0.1	43
MM1ZS5265BX	C6	62	58.90	65.1	2	185	2	1400	0.25	0.1	47
MM1ZS5266BX	D6	68	64.60	71.4	1.8	230	1.8	1600	0.25	0.1	52
MM1ZS5267BX	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.

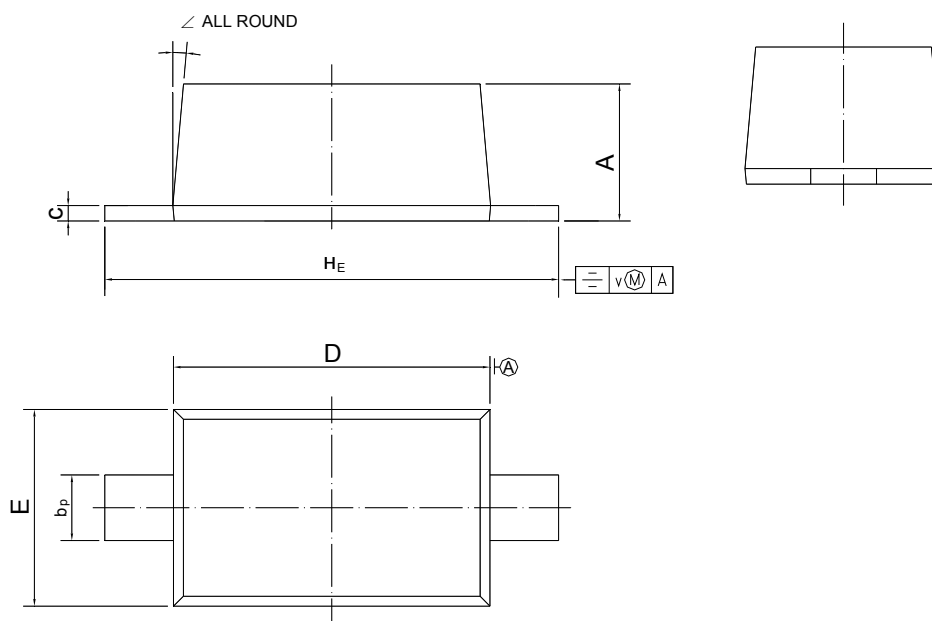




PACKAGE OUTLINE

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

