

Surface Mount Silicon Zener Diodes

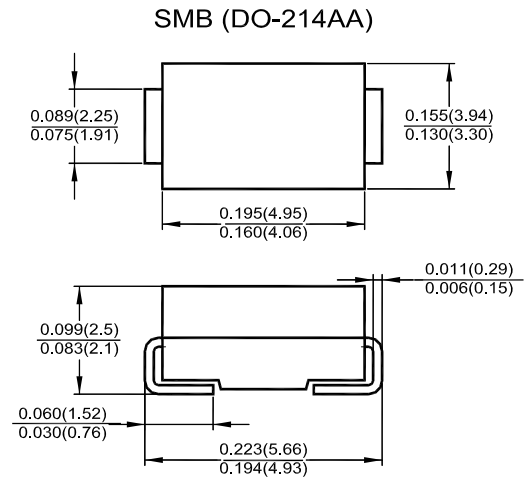
Z2SMB5.6~Z2SMB200

Features

- Plastic material has UL classification 94V-0
- Standard Zener voltage tolerance is graded to the international E24 (5%) standard. Other Voltage tolerances and higher Zener voltages on request.

Mechanical Data

- Plastic case: SMB (DO-214AA)
- Weight approx: 0.1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: Any



Dimensions in inches and (millimeters)

Maximum Ratings(Rating at $T_a = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum Power Dissipation at $T_A = 50^{\circ}\text{C}^{1)}$	P_{tot}	2	W
Non Repetitive Peak Power Dissipation, $t < 10$ ms	P_{ZSM}	40	W
Maximum Thermal Resistance Junction to Ambient	R_{tha}	60	K/W
Maximum Thermal Resistance Junction to Terminal	R_{tht}	15	K/W
Operating Temperature Range	T_j	- 50 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 50 to + 175	$^{\circ}\text{C}$

¹⁾Mounted on P.C.board with 50 mm² copper pads at each terminal

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Electrical Characteristics (Rating at $T_a = 25^\circ\text{C}$ unless otherwise specified)

Type	Zener Voltage Range ¹⁾		Zener Impedance			Reverse Voltage		Maximum Regulator Current ²⁾
	V_{ZT}		at I_{ZT}	Z_{ZT}	at I_{ZT}	V_R	at I_R	
	Min. (V)	Max. (V)	mA	Max. (Ω)	mA	Min. (V)	μA	I_{ZM} (mA)
Z2SMB5.6	5.2	6.0	100	2	100	1.5	1	333
Z2SMB6.2	5.8	6.6	100	2	100	1.5	1	303
Z2SMB6.8	6.4	7.2	100	2	100	2	1	278
Z2SMB7.5	7.0	7.9	100	2	100	2	1	253
Z2SMB8.2	7.7	8.7	100	2	100	3.5	1	230
Z2SMB9.1	8.5	9.6	50	4	50	3.5	1	208
Z2SMB10	9.4	10.6	50	4	50	5	1	189
Z2SMB11	10.4	11.6	50	7	50	5	1	172
Z2SMB12	11.4	12.6	50	7	50	7	1	157
Z2SMB13	12.4	14.1	50	10	50	7	1	142
Z2SMB15	13.8	15.6	50	10	50	10	1	128
Z2SMB16	15.3	17.1	25	15	25	10	1	117
Z2SMB18	16.8	19.1	25	15	25	10	1	105
Z2SMB20	18.8	21.2	25	15	25	10	1	94
Z2SMB22	20.8	23.3	25	15	25	12	1	86
Z2SMB24	22.8	25.6	25	15	25	12	1	78
Z2SMB27	25.1	28.9	25	15	25	14	1	69
Z2SMB30	28	32	25	15	25	14	1	63
Z2SMB33	31	35	25	15	25	17	1	57
Z2SMB36	34	38	10	40	10	17	1	53
Z2SMB39	37	41	10	40	10	20	1	49
Z2SMB43	40	46	10	45	10	20	1	43
Z2SMB47	44	50	10	45	10	24	1	40
Z2SMB51	48	54	10	60	10	24	1	37
Z2SMB56	52	60	10	60	10	28	1	33
Z2SMB62	58	66	10	80	10	28	1	30
Z2SMB68	64	72	10	80	10	34	1	28
Z2SMB75	70	79	10	100	10	34	1	25
Z2SMB82	77	88	10	100	10	41	1	23
Z2SMB91	85	96	5	200	5	41	1	21
Z2SMB100	94	106	5	200	5	50	1	19
Z2SMB110	104	116	5	250	5	50	1	17
Z2SMB120	114	126	5	250	5	60	1	16
Z2SMB130	124	141	5	300	5	60	1	14
Z2SMB150	138	156	5	300	5	75	1	13
Z2SMB160	153	171	5	350	5	75	1	12
Z2SMB180	168	191	5	350	5	90	1	10
Z2SMB200	188	212	5	350	5	90	1	9

¹⁾ Tested with pulses $t_p = 20$ ms

²⁾ Mounted on P.C.board with 50 mm^2 copper pads at each terminal