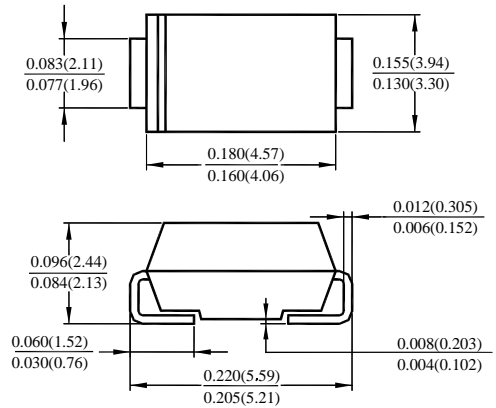


Z2 SMB1 ... Z2 SMB200 (2W)

Features

- Max. solder temperature: 260°C
- Plastic material has UL classification 94V-0
- Standard Zener voltage tolerance is graded to the international E 24 (5%) standard. Other voltage tolerances and higher Zener voltages on request.



Dimensions in inches and (millimeters)

DO-214AA (SMB)

Absolute Maximum Ratings

$T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified

Symbol	Conditions	Values	Units
P_{tot}	Power dissipation, $T_A = 50\text{ }^\circ\text{C}$ ¹⁾	2	W
P_{ZSM}	Non repetitive peak power dissipation, $t < 10\text{ ms}$	40	W
R_{thA}	Max. thermal resistance junction to ambient	60	K/W
R_{thT}	Max. thermal resistance junction to terminal	15	K/W
T_j	Operating junction temperature	- 50 ... + 150	$^\circ\text{C}$
T_s	Storage temperature	- 50 ... + 175	$^\circ\text{C}$

Z2 SMB1 ... Z2 SMB200 (2W)

Maximum ratings
Grenzwerte

Type Typ	Zener voltage ²⁾ Zener-Spanng. ²⁾ $I_Z = I_{Ztest}$ V_{zmin} [V] V_{zmax}		Test cur. Meß- strom I_{Ztest} [mA]	Dyn. resistance Diff. Widerst. $I_{Ztest} / 1 \text{ kHz}$ r_{zj} [Ω]	Temp. Coeffiz. of Z-voltage ...der Z-spanng. α_{VZ} [$10^{-4} / ^\circ\text{C}$]	Reverse volt. Sperrspanng. $I_R = 1 \mu\text{A}$ V_R [V]	Z-current ¹⁾ Z-Strom ¹⁾ $T_A = 50^\circ\text{C}$ I_{Zmax} [mA]
Z2 SMB 1 ³⁾	0.71	0.82	100	0.5 (<1)	-26...-16	-	1000
Z2 SMB 3.9	3.7	4.1	100	4 (<6)	-7...+2	-	488
Z2 SMB 4.3	4.0	4.6	100	3.8 (<6)	-7...+3	-	435
Z2 SMB 4.7	4.4	5.0	100	3 (<5)	-7...+4	-	400
Z2 SMB 5.1	4.8	5.4	100	2 (<3)	-6...+5	-	370
Z2 SMB 5.6	5.2	6.0	100	1 (<2)	-3...+5	> 1.5	333
Z2 SMB 6.2	5.8	6.6	100	1 (<2)	-1...+6	> 1.5	303
Z2 SMB 6.8	6.4	7.2	100	1 (<2)	0...+7	> 2	278
Z2 SMB 7.5	7.0	7.9	100	1 (<2)	0...+7	> 2	253
Z2 SMB 8.2	7.7	8.7	100	1 (<2)	+3...+8	> 3.5	230
Z2 SMB 9.1	8.5	9.6	50	2 (<4)	+3...+8	> 3.5	208
Z2 SMB 10	9.4	10.6	50	2 (<4)	+5...+9	> 5	189
Z2 SMB 11	10.4	11.6	50	4 (<7)	+5...+10	> 5	172
Z2 SMB 12	11.4	12.7	50	4 (<7)	+5...+10	> 7	157
Z2 SMB 13	12.4	14.1	50	5 (<10)	+5...+10	> 7	142
Z2 SMB 15	13.8	15.6	50	5 (<10)	+5...+10	> 10	128
Z2 SMB 16	15.3	17.1	25	6 (<15)	+6...+11	> 10	117
Z2 SMB 18	16.8	19.1	25	6 (<15)	+6...+11	> 10	105
Z2 SMB 20	18.8	21.2	25	6 (<15)	+6...+11	> 10	94
Z2 SMB 22	20.8	23.3	25	6 (<15)	+6...+11	> 12	86
Z2 SMB 24	22.8	25.6	25	7 (<15)	+6...+11	> 12	78
Z2 SMB 27	25.1	28.9	25	7 (<15)	+6...+11	> 14	69
Z2 SMB 30	28	32	25	8 (<15)	+6...+11	> 14	63
Z2 SMB 33	31	35	25	8 (<15)	+6...+11	> 17	57
Z2 SMB 36	34	38	10	16 (<30)	+6...+11	> 17	53
Z2 SMB 39	37	41	10	20 (<40)	+6...+11	> 20	49
Z2 SMB 43	40	46	10	24 (<40)	+7...+12	> 20	43
Z2 SMB 47	44	50	10	24 (<40)	+7...+12	> 24	40
Z2 SMB 51	48	54	10	25 (<60)	+7...+12	> 24	37
Z2 SMB 56	52	60	10	25 (<60)	+7...+12	> 28	33
Z2 SMB 62	58	66	10	25 (<80)	+8...+13	> 28	30
Z2 SMB 68	64	72	10	25 (<80)	+8...+13	> 34	28
Z2 SMB 75	70	79	10	30 (<100)	+8...+13	> 34	25
Z2 SMB 82	77	88	10	30 (<100)	+8...+13	> 41	23
Z2 SMB 91	85	96	5	40 (<150)	+9...+13	> 41	21
Z2 SMB 100	94	106	5	60 (<150)	+9...+13	> 50	19
Z2 SMB 110	104	116	5	80 (<200)	+9...+13	> 50	17
Z2 SMB 120	114	127	5	80 (<200)	+9...+13	> 60	16
Z2 SMB 130	124	141	5	90 (<250)	+9...+13	> 60	14
Z2 SMB 150	138	156	5	100 (<250)	+9...+13	> 75	13
Z2 SMB 160	153	171	5	110 (<300)	+9...+13	> 75	12
Z2 SMB 180	168	191	5	120 (<350)	+9...+13	> 90	10
Z2 SMB 200	188	212	5	150 (<350)	+9...+13	> 90	9