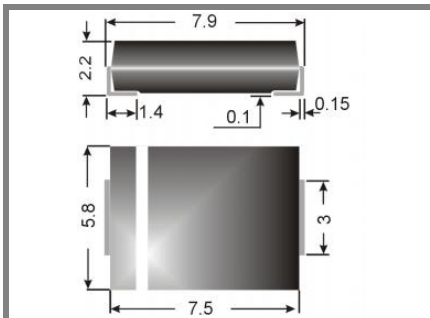


Z3 SMB 1 ... Z3 SMB 200 (3W)



Surface mount diode

Zener silicon diodes

Z3 SMB 1 ... Z3 SMB 200

Maximum Power Dissipation: 3 W

Nominal Z-voltage: 1 to 200 V

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.

Mechanical Data

- Plastic case: SMB / DO-214AA
- Weight approx.: 0,1 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 3000 pieces per reel

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

2) Tested with pulses

3) The Z2SMC 1 is a diode operated in forward. Hence, the index of all parameters should be "F" instead of "Z". The cathode, indicated by a white ring is to be connected to the negative pole.

Absolute Maximum Ratings		T _A = 25 °C, unless otherwise specified	
Symbol	Conditions	Values	Units
P _{tot}	Power dissipation, T _A = 50 °C ¹⁾	3	W
P _{ZSM}	Non repetitive peak power dissipation, t < 10 ms	60	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	°C
T _s	Storage temperature	- 50 ... + 150	°C

Type	Zener Voltage ²⁾ V _Z @I _{ZT}		Test curr. I _{ZT} mA	Dyn. Resistance Z _{ZT} @I _{ZT} Ω	Temp. Coeffiz. of V _Z a _{VZ} 10 ⁻⁴ /°C	Z- curr. ¹⁾ T _A = 50 °C		
	V _{Zmin} V	V _{Zmax} V				I _R μA	V _R V	I _{Zmax} mA
Z3SMB 1 ³⁾	0,71	0,82	100	0,5 (<1)	- 26 ... - 16	1	> 1,5	455
Z3SMB 6,2	5,8	6,6	100	1 (<2)	- 1 ... + 6	1	> 2	417
Z3SMB 6,8	6,4	7,2	100	1 (<2)	0 ... + 7	1	> 2	380
Z3SMB 7,5	7	7,9	100	1 (<2)	0 ... + 7	1	> 3,5	345
Z3SMB 8,2	7,7	8,7	100	1 (<2)	+ 3 ... + 8	1	> 3,5	313
Z3SMB 9,1	8,5	9,6	50	2 (<4)	+ 3 ... + 8	1	> 5	283
Z3SMB 10	9,4	10,6	50	2 (<4)	+ 5 ... + 9	1	> 5	259
Z3SMB 11	10,4	11,6	50	4 (<7)	+ 5 ... + 10	1	> 7	236
Z3SMB 12	11,4	12,7	50	4 (<7)	+ 5 ... + 10	1	> 7	213
Z3SMB 13	12,4	14,1	50	5 (<10)	+ 5 ... + 10	1	> 10	192
Z3SMB 15	13,8	15,6	50	5 (<10)	+ 5 ... + 10	1	> 10	175
Z3SMB 16	15,3	17,1	25	6 (<15)	+ 6 ... + 11	1	> 10	157
Z3SMB 18	16,8	19,1	25	6 (<15)	+ 6 ... + 11	1	> 10	142
Z3SMB 20	18,8	21,2	25	6 (<15)	+ 6 ... + 11	1	> 12	129
Z3SMB 22	20,8	23,3	25	6 (<15)	+ 6 ... + 11	1	> 12	117
Z3SMB 24	22,8	25,6	25	7 (<15)	+ 6 ... + 11	1	> 14	104
Z3SMB 27	25,1	28,9	25	7 (<15)	+ 6 ... + 11	1	> 14	94
Z3SMB 30	28	32	25	8 (<15)	+ 6 ... + 11	1	> 17	86
Z3SMB 33	31	35	25	8 (<15)	+ 6 ... + 11	1	> 17	79
Z3SMB 36	34	38	10	16 (<30)	+ 6 ... + 11	1	> 20	73
Z3SMB 39	37	41	10	20 (<40)	+ 7 ... + 12	1	> 20	65
Z3SMB 43	40	46	10	24 (<40)	+ 7 ... + 12	1	> 24	60
Z3SMB 47	44	50	10	25 (<60)	+ 7 ... + 12	1	> 24	56
Z3SMB 51	48	54	10	25 (<60)	+ 7 ... + 12	1	> 28	50
Z3SMB 56	52	60	10	25 (<80)	+ 8 ... + 13	1	> 28	45
Z3SMB 62	58	66	10	25 (<80)	+ 8 ... + 13	1	> 34	42
Z3SMB 68	64	72	10	30 (<100)	+ 8 ... + 13	1	> 41	34
Z3SMB 75	70	79	10	30 (<100)	+ 8 ... + 13	1	> 41	31
Z3SMB 82	77	88	5	40 (<150)	+ 9 ... + 13	1	> 50	28
Z3SMB 91	85	96	5	60 (<150)	+ 9 ... + 13	1	> 50	26
Z3SMB 100	94	106	5	80 (<200)	+ 9 ... + 13	1	> 60	24
Z3SMB 110	104	116	5	90 (<250)	+ 9 ... + 13	1	> 60	21
Z3SMB 120	114	127	5	100 (<300)	+ 9 ... + 13	1	> 75	19
Z3SMB 130	124	141	5	110 (<350)	+ 9 ... + 13	1	> 75	18
Z3SMB 150	138	156	5	120 (<350)	+ 9 ... + 13	1	> 90	16
Z3SMB 160	153	171	5	150 (<350)	+ 9 ... + 13	1	> 90	14
Z3SMB 180	168	191	5	150 (<350)	+ 9 ... + 13	1	> 90	14
Z3SMB 200	188	212	5	150 (<350)	+ 9 ... + 13	1	> 90	14