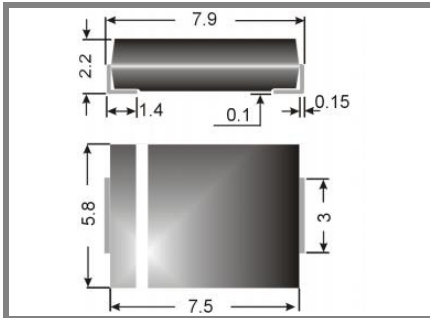


# Z3 SMC1 ... Z3 SMC200(3W)



Surface mount diode

## Zener silicon diodes

### Z3 SMC1...Z3 SMC200(3W)

**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 E24 (5%) standard. Other voltage tolerances and higher Zener voltages on request.

### Mechanical Data

- Plastic case: SMC / DO214AB
- Weight approx.: 0,21 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 mm<sup>2</sup> copper pads at each terminal

2) Tested with pulses

3) The Z3SMC1 is a diode operated in forward. Hence, the index of all parameters should be "F" instead of "Z". The cathode, indicated by a white band is to be connected to the negative pole

Absolute Maximum Ratings		T <sub>c</sub> = 25 °C, unless otherwise specified	
Symbol	Conditions	Values	Units
P <sub>tot</sub>	Power dissipation, T <sub>A</sub> = 50 °C <sup>1)</sup>	3	W
P <sub>ZSM</sub>	Non repetitive peak power dissipation, t < 10 ms	60	W
R <sub>thA</sub>	Max. thermal resistance junction to ambient	33	K/W
R <sub>thT</sub>	Max. thermal resistance junction to terminal	10	K/W
T <sub>j</sub>	Operating junction temperature	-50...+150	°C
T <sub>s</sub>	Storage temperature	-50...+175	°C

Type	Zener Voltage <sup>2)</sup> V <sub>Z</sub> @I <sub>ZT</sub>		Test curr. I <sub>ZT</sub> mA	Dyn. Resistance Z <sub>ZT</sub> @I <sub>ZT</sub> Ω	Temp. Coeffiz. of V <sub>Z</sub> a <sub>VZ</sub> 10 <sup>-4</sup> /°C	I <sub>R</sub>   V <sub>R</sub>		Z-curr. <sup>1)</sup> T <sub>A</sub> = 50 °C I <sub>Zmax</sub> mA
	V <sub>Zmin</sub> V	V <sub>Zmax</sub> V				I <sub>R</sub> μA	V <sub>R</sub> V	
Z3SMC1 <sup>3)</sup>	0,71	0,82	100	0,5(<1)	-26...-16	1	-	2000
Z3SMC10	9,4	10,6	50	2(<4)	+5...+9	1	>5	283
Z3SMC11	10,4	11,6	50	4(<7)	+5...+10	1	>5	259
Z3SMC12	11,4	12,7	50	4(<7)	+5...+10	1	>7	236
Z3SMC13	12,4	14,1	50	5(<10)	+5...+10	1	>7	213
Z3SMC15	13,8	15,6	50	5(<10)	+5...+10	1	>10	192
Z3SMC16	15,3	17,1	25	6(<15)	+6...+11	1	>10	175
Z3SMC18	16,8	19,1	25	6(<15)	+6...+11	1	>10	157
Z3SMC20	18,8	21,2	25	6(<15)	+6...+11	1	>10	142
Z3SMC22	20,8	23,3	25	6(<15)	+6...+11	1	>12	129
Z3SMC24	22,8	25,6	25	7(<15)	+6...+11	1	>12	117
Z3SMC27	25,1	28,9	25	7(<15)	+6...+11	1	>14	104
Z3SMC30	28	32	25	8(<15)	+6...+11	1	>14	94
Z3SMC33	31	35	25	8(<15)	+6...+11	1	>17	86
Z3SMC36	34	38	10	16(<30)	+6...+11	1	>17	79
Z3SMC39	37	41	10	20(<40)	+6...+11	1	>20	73
Z3SMC43	40	46	10	24(<40)	+7...+12	1	>20	65
Z3SMC47	44	50	10	24(<40)	+7...+12	1	>24	60
Z3SMC51	48	54	10	25(<60)	+7...+12	1	>24	56
Z3SMC56	52	60	10	25(<60)	+7...+12	1	>28	50
Z3SMC62	58	66	10	25(<80)	+8...+13	1	>28	45
Z3SMC68	64	72	10	25(<80)	+8...+13	1	>34	42
Z3SMC75	70	79	10	30(<100)	+8...+13	1	>34	38
Z3SMC82	77	88	10	30(<100)	+8...+13	1	>41	34
Z3SMC91	85	96	5	40(<150)	+9...+13	1	>41	31
Z3SMC100	94	106	5	60(<150)	+9...+13	1	>50	28
Z3SMC110	104	116	5	80(<200)	+9...+13	1	>50	26
Z3SMC120	114	127	5	80(<200)	+9...+13	1	>60	24
Z3SMC130	124	141	5	90(<250)	+9...+13	1	>60	21
Z3SMC150	138	156	5	100(<250)	+9...+13	1	>75	19
Z3SMC160	153	171	5	110(<300)	+9...+13	1	>75	18
Z3SMC180	168	191	5	120(<350)	+9...+13	1	>90	16
Z3SMC200	188	212	5	150(<350)	+9...+13	1	>90	14