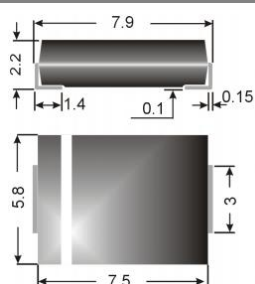


Z3 SMC 1 ... Z3 SMC 200 (3W)



Surface mount diode

Zener silicon diodes

Z3 SMC 1 ... Z3 SMC 200 (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 E 24 (5%) standard. Other voltage tolerances and higher Zener voltages on request.

Mechanical Data

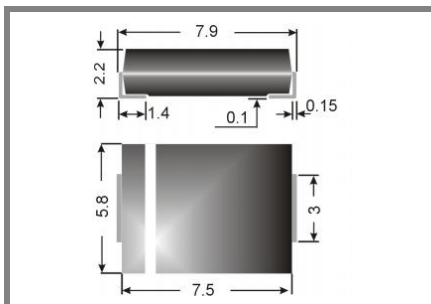
- Plastic case: SMC / DO-214AB
- Weight approx.: 0,21 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 3000 pieces per reel

¹⁾ Mounted on P.C. board with 50 mm² copper pads at each terminal. Tested with pulses. 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 ring is to be connected to the negative pole.

Absolute Maximum Ratings		T _s = 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	V
R _{thA}	Max. thermal resistance junction to ambient ¹⁾	33	K/W
R _{thT}	Max. thermal resistance junction to case	10	K/W
T _j	Operating junction temperature	- 50 ... + 150	°C
T _s	Storage temperature	- 50 ... + 150	°C

Type	Zener Voltage V _Z @I _{ZT}		Test curr. I _{ZT} mA	Dyn. Resistance Z _{VT} @ I _{ZT}	Temp. Coeff. of V _Z 10 ⁻⁴ °C	Reverse curr.		Z curr. T _A = 50 °C i _{Zmax} mA
	V _{Zmin} V	V _{Zmax} V				I _R µA	V _R V	
Z3SMC1 ³⁾	0,71	0,82	100	0,5 (<1)	- 26 ... - 16		-	2000
Z3SMC6,2	5,8	6,6	100	1 (<2)	- 1 ... + 6	1	> 1,5	455
Z3SMC6,8	6,4	7,2	100	1 (<2)	0 ... + 7	1	> 2	417
Z3SMC7,5	7	7,9	100	1 (<2)	0 ... + 7	1	> 2	380
Z3SMC8,2	7,7	8,7	100	1 (<2)	+ 3 ... + 8	1	> 3,5	345
Z3SMC9,1	8,5	9,6	50	2 (<4)	+ 3 ... + 8	1	> 3,5	313
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

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Type	Zener Voltage $V_Z @ I_{ZT}$		Test curr. I_{ZT}	Dyn. Resistance $Z_{ZT} @ I_{ZT}$	Temp. Coeffiz. of V_Z	Reverse curr.		Z curr. $T_A = 50$ $^{\circ}\text{C}$
	V_{Zmin} V	V_{Zmax} V	mA		10^{-4} $^{\circ}\text{C}$	I_R μA	V_R V	i_{Zmax} mA

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