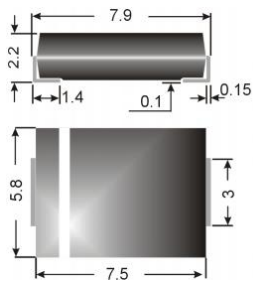


Z3 SMC 1 ... Z3 SMC 200 (3W)



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.

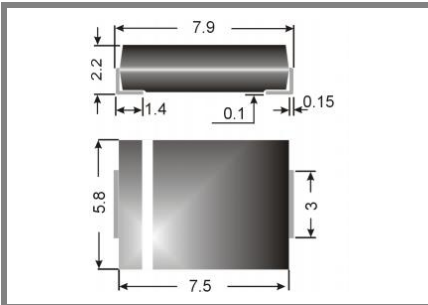
Absolute Maximum Ratings		T _s = 25 °C, unless otherwise specified	
Symbol	Conditions	Values	Units
P _{tot}	Power dissipation, T _A = 50 °C ¹⁾	3	W
P _{ZSM}	Non repetitive peak power dissipation, t < 10 ms	60	V
R _{thA}	Max. thermal resistance junction to ambient ¹⁾	33	K/W
R _{thT}	Max. thermal resistance 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}	Dyn. Resistance			Temp. Coeffiz. of V _Z 10 ⁻⁴ °C	Reverse curr.		Z curr. T _A = 50 °C i _{Zmax} mA
	V _{Zmin} V	V _{Zmax} V		Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{ZK} mA		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

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	V_{Zmin}	V_{Zmax}		$Z_{ZT} @$	$Z_{ZK} @$	I_{ZK}		I_R	V_R	
	V	V		I_{ZT}	I_{ZK}	mA		µA	V	
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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Surface mount diode

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

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Dissipation: 3 W**

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