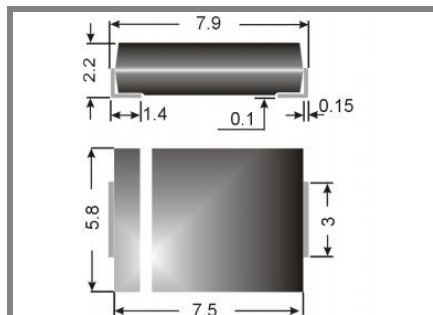


Z3 SMC1 ... Z3 SMC200(3W)



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 mm² 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_c = 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	33	K/W
R _{thT}	Max. thermal resistance junction to terminal	10	K/W
T _j	Operating junction temperature	-50...+150	°C
T _s	Storage temperature	-50...+175	°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	I _{Zmax} mA
Z3SMC1 ³⁾	0,71	0,82	100	0,5(<1)	-26...-16	1	2000
Z3SMC10	9,4	10,6	50	2(<4)	+5...+9	1	283
Z3SMC11	10,4	11,6	50	4(<7)	+5...+10	1	259
Z3SMC12	11,4	12,7	50	4(<7)	+5...+10	1	236
Z3SMC13	12,4	14,1	50	5(<10)	+5...+10	1	213
Z3SMC15	13,8	15,6	50	5(<10)	+5...+10	1	192
Z3SMC16	15,3	17,1	25	6(<15)	+6...+11	1	175
Z3SMC18	16,8	19,1	25	6(<15)	+6...+11	1	157
Z3SMC20	18,8	21,2	25	6(<15)	+6...+11	1	142
Z3SMC22	20,8	23,3	25	6(<15)	+6...+11	1	129
Z3SMC24	22,8	25,6	25	7(<15)	+6...+11	1	117
Z3SMC27	25,1	28,9	25	7(<15)	+6...+11	1	104
Z3SMC30	28	32	25	8(<15)	+6...+11	1	94
Z3SMC33	31	35	25	8(<15)	+6...+11	1	86
Z3SMC36	34	38	10	16(<30)	+6...+11	1	79
Z3SMC39	37	41	10	20(<40)	+6...+11	1	73
Z3SMC43	40	46	10	24(<40)	+7...+12	1	65
Z3SMC47	44	50	10	24(<40)	+7...+12	1	60
Z3SMC51	48	54	10	25(<60)	+7...+12	1	56
Z3SMC56	52	60	10	25(<60)	+7...+12	1	50
Z3SMC62	58	66	10	25(<80)	+8...+13	1	45
Z3SMC68	64	72	10	25(<80)	+8...+13	1	42
Z3SMC75	70	79	10	30(<100)	+8...+13	1	38
Z3SMC82	77	88	10	30(<100)	+8...+13	1	34
Z3SMC91	85	96	5	40(<150)	+9...+13	1	31
Z3SMC100	94	106	5	60(<150)	+9...+13	1	28
Z3SMC110	104	116	5	80(<200)	+9...+13	1	26
Z3SMC120	114	127	5	80(<200)	+9...+13	1	24
Z3SMC130	124	141	5	90(<250)	+9...+13	1	21
Z3SMC150	138	156	5	100(<250)	+9...+13	1	19
Z3SMC160	153	171	5	110(<300)	+9...+13	1	18
Z3SMC180	168	191	5	120(<350)	+9...+13	1	16
Z3SMC200	188	212	5	150(<350)	+9...+13	1	14