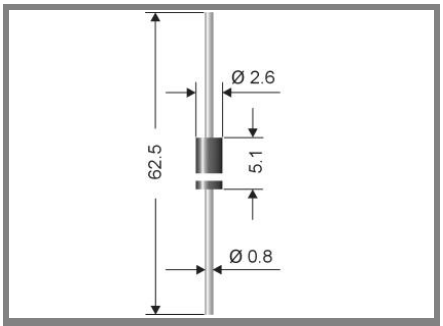
ZY 1 ... ZY 200 (2W)



Axial lead diode

Zener silicon diodes

ZY 1...ZY 200(2W)

Maximum Power Dissipation: 2 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 DO-41/DO-204AL
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 5000 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

2) Tested with pulses

3) The ZY1 is a diode, operated in forward. The cathode, indicated by a ring, 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)	2	W
P_{ZSM}	Non repetitive peak power dissipation, t < 10 ms	60	W
R_{thA}	Max. thermal resistance junction to ambient	45	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 ... + 175	°C

Type	Zener Voltage 2) V_Z@I_{ZT}		Test curr. I_{ZT}	Dyn. Resistance	Temp. Coeffiz. of V_z			Z-curr. 1) T_A = 50 °C
	V_{Zmin} V	V_{Zmax} V	mA	Z_{ZT}@I_{ZT} Ω	a_{VZ} 10^{-4}/°C	I_R µA	V_R V	I_{Zmax} mA
ZY 1 3)	0,71	0,82	100	0,5 (<1)	- 26 ... - 16	1	-	1500
ZY 10	9,4	10,6	50	2 (<4)	+ 5 ... + 9	1	> 5	170
ZY 11	10,4	11,6	50	3 (<6)	+ 5 ... + 10	1	> 5	155
ZY 12	11,4	12,7	50	4 (<7)	+ 5 ... + 10	1	> 7	142
ZY 13	12,4	14,1	50	5 (<9)	+ 5 ... + 10	1	> 7	128
ZY 15	13,8	15,6	50	5 (<10)	+ 5 ... + 10	1	> 10	115
ZY 16	15,3	17,1	25	6 (<12)	+ 6 ... + 11	1	> 10	105
ZY 18	16,8	19,1	25	6 (<15)	+ 6 ... + 11	1	> 10	94
ZY 20	18,8	21,2	25	6 (<15)	+ 6 ... + 11	1	> 10	85
ZY 22	20,8	23,3	25	6 (<15)	+ 6 ... + 11	1	> 12	77
ZY 24	22,8	25,6	25	7 (<15)	+ 6 ... + 11	1	> 12	70
ZY 27	25,1	28,9	25	7 (<15)	+ 6 ... + 11	1	> 14	62
ZY 30	28	32	25	8 (<15)	+ 6 ... + 11	1	> 14	56
ZY 33	31	35	25	8 (<15)	+ 6 ... + 11	1	> 17	51
ZY 36	34	38	10	16 (<40)	+ 6 ... + 11	1	> 17	47
ZY 39	37	41	10	20 (<40)	+ 6 ... + 11	1	> 20	44
ZY 43	40	46	10	24 (<45)	+ 7 ... + 12	1	> 20	39
ZY 47	44	50	10	24 (<45)	+ 7 ... + 12	1	> 24	36
ZY 51	48	54	10	25 (<60)	+ 7 ... + 12	1	> 24	33
ZY 56	52	60	10	25 (<60)	+ 7 ... + 12	1	> 28	30
ZY 62	58	66	10	25 (<80)	+ 8 ... + 13	1	> 28	27
ZY 68	64	72	10	25 (<80)	+ 8 ... + 13	1	> 34	25
ZY 75	70	79	10	30 (<100)	+ 8 ... + 13	1	> 34	23
ZY 82	77	88	10	30 (<100)	+ 8 ... + 13	1	> 41	20
ZY 91	85	96	5	40 (<200)	+ 9 ... + 13	1	> 41	19
ZY 100	94	106	5	60 (<200)	+ 9 ... + 13	1	> 50	17
ZY 110	104	116	5	80 (<250)	+ 9 ... + 13	1	> 50	16
ZY 120	114	127	5	80 (<250)	+ 9 ... + 13	1	> 60	14
ZY 130	124	141	5	90 (<300)	+ 9 ... + 13	1	> 60	13
ZY 150	138	156	5	100(<300)	+ 9 ... + 13	1	> 75	12
ZY 160	153	171	5	110(<350)	+ 9 ... + 13	1	> 75	11
ZY 180	168	191	5	120(<350)	+ 9 ... + 13	1	> 90	9
ZY 200	188	212	5	150(<350)	+ 9 ... + 13	1	> 90	8

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