

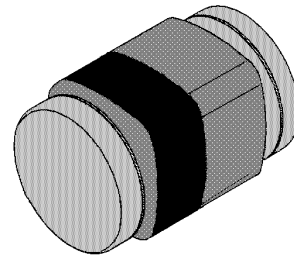
ZMC1 ... ZMC200

SILICON PLANAR ZENER DIODES

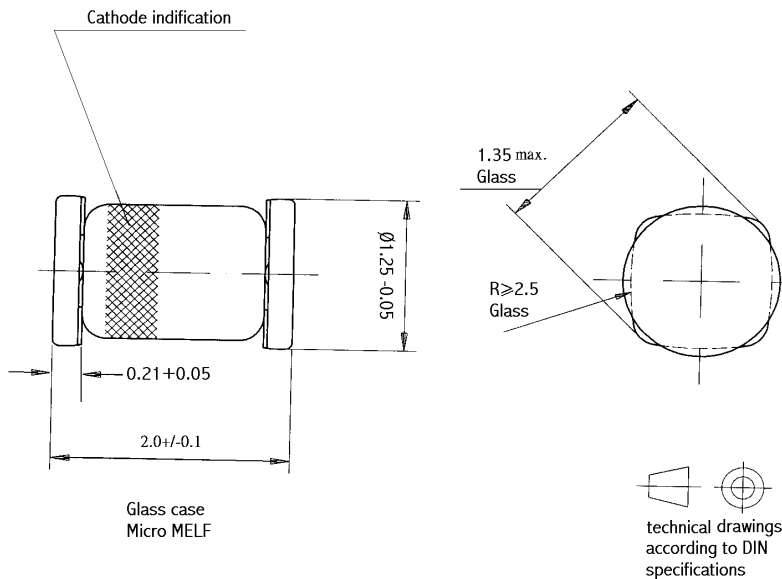
Features

- Fits onto SOD-323 / SOT-23 footprints
- Micro Melf package

LS-31



Dimensions in mm



Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

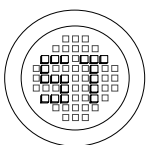
Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	- 55 to + 175	$^\circ\text{C}$

¹⁾ Valid provided that electrodes are kept at ambient temperature.

Characteristics at $T_{\text{amb}} = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW

¹⁾ Valid provided that electrodes are kept at ambient temperature.



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SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098

Dated : 08/05/2006

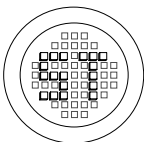
ZMC1 ... ZMC200

Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V _{Znom} V	I _{ZT} mA	for V _{ZT} ²⁾ V	r _{zT} Ω	r _{zK} Ω	at I _{ZK} mA	T _a = 25 °C μA	T _a = 125 °C μA	I _R at V _R V	TK _{VZ} %/K
ZMC1 ³⁾	0.75	5	0.7...0.8	< 8	< 50	1	--	--	--	-0.26...-0.23
ZMC2V0	2.0	5	1.80...2.15	< 85	< 600	1	< 100	< 200	1	-0.09...-0.06
ZMC2V2	2.2	5	2.08...2.33	< 85	< 600	1	< 75	< 160	1	-0.09...-0.06
ZMC2V4	2.4	5	2.28...2.56	< 85	< 600	1	< 50	< 100	1	-0.09...-0.06
ZMC2V7	2.7	5	2.5...2.9	< 85	< 600	1	< 10	< 50	1	-0.09...-0.06
ZMC3V0	3.0	5	2.8...3.2	< 85	< 600	1	< 4	< 40	1	-0.08...-0.05
ZMC3V3	3.3	5	3.1...3.5	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
ZMC3V6	3.6	5	3.4...3.8	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
ZMC3V9	3.9	5	3.7...4.1	< 85	< 600	1	< 2	< 40	1	-0.08...-0.05
ZMC4V3	4.3	5	4.0...4.6	< 75	< 600	1	< 1	< 20	1	-0.06...-0.03
ZMC4V7	4.7	5	4.4...5.0	< 60	< 600	1	< 0.5	< 10	1	-0.05...+0.02
ZMC5V1	5.1	5	4.8...5.4	< 35	< 550	1	< 0.1	< 2	1	-0.02...+0.02
ZMC5V6	5.6	5	5.2...6.0	< 25	< 450	1	< 0.1	< 2	1	-0.05...+0.05
ZMC6V2	6.2	5	5.8...6.6	< 10	< 200	1	< 0.1	< 2	2	0.03...0.06
ZMC6V8	6.8	5	6.4...7.2	< 8	< 150	1	< 0.1	< 2	3	0.03...0.07
ZMC7V5	7.5	5	7.0...7.9	< 7	< 50	1	< 0.1	< 2	5	0.03...0.07
ZMC8V2	8.2	5	7.7...8.7	< 7	< 50	1	< 0.1	< 2	6.2	0.03...0.08
ZMC9V1	9.1	5	8.5...9.6	< 10	< 50	1	< 0.1	< 2	6.8	0.03...0.09
ZMC10	10	5	9.4...10.6	< 15	< 70	1	< 0.1	< 2	7.5	0.03...0.1
ZMC11	11	5	10.4...11.6	< 20	< 70	1	< 0.1	< 2	8.2	0.03...0.11
ZMC12	12	5	11.4...12.7	< 20	< 90	1	< 0.1	< 2	9.1	0.03...0.11
ZMC13	13	5	12.4...14.1	< 26	< 110	1	< 0.1	< 2	10	0.03...0.11
ZMC15	15	5	13.8...15.6	< 30	< 110	1	< 0.1	< 2	11	0.03...0.11
ZMC16	16	5	15.3...17.1	< 40	< 170	1	< 0.1	< 2	12	0.03...0.11
ZMC18	18	5	16.8...19.1	< 50	< 170	1	< 0.1	< 2	13	0.03...0.11
ZMC20	20	5	18.8...21.2	< 55	< 220	1	< 0.1	< 2	15	0.03...0.11
ZMC22	22	5	20.8...23.3	< 55	< 220	1	< 0.1	< 2	16	0.04...0.12
ZMC24	24	5	22.8...25.6	< 80	< 220	1	< 0.1	< 2	18	0.04...0.12
ZMC27	27	5	25.1...28.9	< 80	< 220	1	< 0.1	< 2	20	0.04...0.12
ZMC30	30	5	28...32	< 80	< 220	1	< 0.1	< 2	22	0.04...0.12
ZMC33	33	5	31...35	< 80	< 220	1	< 0.1	< 2	24	0.04...0.12
ZMC36	36	5	34...38	< 80	< 220	1	< 0.1	< 2	27	0.04...0.12
ZMC39	39	2.5	37...41	< 90	< 500	0.5	< 0.1	< 5	30	0.04...0.12
ZMC43	43	2.5	40...46	< 90	< 500	0.5	< 0.1	< 5	33	0.04...0.12
ZMC47	47	2.5	44...50	< 110	< 600	0.5	< 0.1	< 5	36	0.04...0.12
ZMC51	51	2.5	48...54	< 125	< 700	0.5	< 0.1	< 10	39	0.04...0.12
ZMC56	56	2.5	52...60	< 135	< 700	0.5	< 0.1	< 10	43	0.04...0.12
ZMC62	62	2.5	58...66	< 150	< 1000	0.5	< 0.1	< 10	47	0.04...0.12
ZMC68	68	2.5	64...72	< 200	< 1000	0.5	< 0.1	< 10	51	0.04...0.12
ZMC75	75	2.5	70...79	< 250	< 1000	0.5	< 0.1	< 10	56	0.04...0.12
ZMC82	82	2.5	77...87	< 300	< 1500	0.25	< 0.1	< 10	62	0.05...0.12
ZMC91	91	1	85...96	< 450	< 2000	0.1	< 0.1	< 10	68	0.05...0.12
ZMC100	100	1	94...106	< 450	< 5000	0.1	< 0.1	< 10	75	0.05...0.12
ZMC110	110	1	104...116	< 600	< 5000	0.1	< 0.1	< 10	82	0.05...0.12
ZMC120	120	1	114...127	< 800	< 5500	0.1	< 0.1	< 10	91	0.05...0.12
ZMC130	130	1	124...141	< 950	< 6000	0.1	< 0.1	< 10	100	0.05...0.12
ZMC150	150	1	138...156	< 1250	< 6500	0.1	< 0.1	< 10	110	0.05...0.12
ZMC160	160	1	153...171	< 1400	< 7000	0.1	< 0.1	< 10	120	0.05...0.12
ZMC180	180	1	168...191	< 1700	< 8500	0.1	< 0.1	< 10	130	0.05...0.12
ZMC200	200	1	188...212	< 2000	< 10000	0.1	< 0.1	< 10	150	0.05...0.12

¹⁾ Tested with pulse t_p = 20 ms.

²⁾ Valid provided that electrodes are kept at ambient temperature.

³⁾ The ZMC1 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.



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