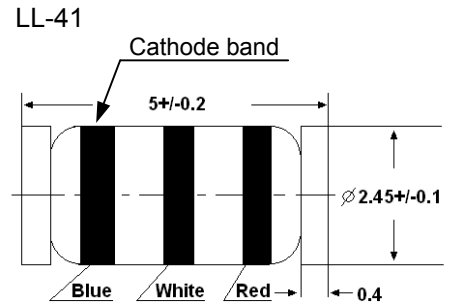


ZMY1...ZMY100(1W)

SILICON PLANAR POWER ZENER DIODES

for use in stabilizing and clipping circuits with high power rating. The Zener voltages are graded according to the international E 24 standard. Smaller voltage tolerances are upon request.



Glass case MELF
Dimensions in mm

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

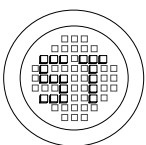
Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +175	$^\circ\text{C}$

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}	170 ¹⁾	K/W

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



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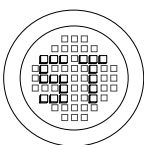
Type	Zener Voltage ²⁾	Dynamic Resistance at I_{ZT} , $f = 1$ KHz r_{zj} (Ω)	Temp. Coeff. of Zener Volt. at I_{ZT} α_{VZ} ($10^{-4}/K$)	Test Current I_{ZT} (mA)	Maximum Reverse Leakage Current		Admissible Zener Current ¹⁾ at $T_{amb} = 25$ °C I_Z (mA)
	at I_{ZT} V_Z (V)				I_R (μA) at V_R (V)	I_Z (mA)	
ZMY1 ³⁾	0.65...0.75	< 8	-26...-23	5	-	-	406
ZMY3V0	2.8...3.2	< 8	-8...+1	100	-	-	260
ZMY3V3	3.1...3.5	< 8	-8...+1	100	150	1	240
ZMY3V6	3.4...3.8	< 8	-8...+1	100	100	1	220
ZMY3V9	3.7...4.1	< 7	-7...+2	100	100	1	203
ZMY4V3	4.0...4.6	< 7	-7...+3	100	50	1	182
ZMY4V7	4.4...5.0	< 7	-7...+4	100	10	1	165
ZMY5V1	4.8...5.4	< 5	-6...+5	100	10	1	150
ZMY5V6	5.2...6.0	< 2	-3...+5	100	0.5	2	135
ZMY6V2	5.8...6.6	< 2	-1...+6	100	0.5	3	128
ZMY6V8	6.4...7.2	< 2	0...+7	100	0.5	4	110
ZMY7V5	7.0...7.9	< 2	0...+7	100	0.5	5	100
ZMY8V2	7.7...8.7	< 2	+3...+8	100	0.5	6	89
ZMY9V1	8.5...9.6	< 4	+3...+8	50	0.5	7	82
ZMY10	9.4...10.6	< 4	+5...+9	50	0.5	7.6	74
ZMY11	10.4...11.6	< 7	+5...+10	50	0.5	8.4	66
ZMY12	11.4...12.7	< 7	+5...+10	50	0.5	9.1	60
ZMY13	12.4...14.1	< 9	+5...+10	50	0.5	9.9	55
ZMY15	13.8...15.8	< 9	+5...+10	50	0.5	11.4	49
ZMY16	15.3...17.1	< 10	+7...+11	25	0.5	12.2	44
ZMY18	16.8...19.1	< 11	+7...+11	25	0.5	13.7	40
ZMY20	18.8...21.2	< 12	+7...+11	25	0.5	15.2	36
ZMY22	20.8...23.3	< 13	+7...+11	25	0.5	16.7	34
ZMY24	22.8...25.6	< 14	+7...+12	25	0.5	18.2	29
ZMY27	25.1...28.9	< 15	+7...+12	25	0.5	20.6	27
ZMY30	28...32	< 20	+7...+12	25	0.5	22.8	25
ZMY33	31...35	< 20	+7...+12	25	0.5	25.1	22
ZMY36	34...38	< 60	+7...+12	10	0.5	27.4	20
ZMY39	37...41	< 60	+8...+12	10	0.5	29.7	18
ZMY43	40...46	< 80	+8...+13	10	0.5	32.7	17
ZMY47	44...50	< 80	+8...+13	10	0.5	35.8	15
ZMY51	48...54	< 100	+8...+13	10	0.5	38.8	14
ZMY56	52...60	< 100	+8...+13	10	0.5	42.6	13
ZMY62	58...66	< 130	+8...+13	10	0.5	47.1	11
ZMY68	64...72	< 130	+8...+13	10	0.5	51.7	10
ZMY75	70...79	< 160	+8...+13	10	0.5	56.0	9
ZMY82	77...88	< 160	+8...+13	10	0.5	62.2	8
ZMY91	85...96	< 250	+9...+13	5	0.5	69.2	7.5
ZMY100	94...106	< 250	+9...+13	5	0.5	76	7

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

²⁾ Tested with pulses $t_p = 20$ ms

³⁾ The ZMY1V0 is a silicon diode operated in forward direction. Hence, the index of all characteristics and maximum ratings should be "F" instead of "Z" . Connect the cathode terminal to the negative pole.

For devices in glass case MELF with higher Zener voltage but same power dissipation see types ZMU100...ZMU180.



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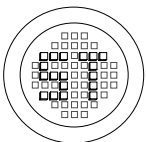
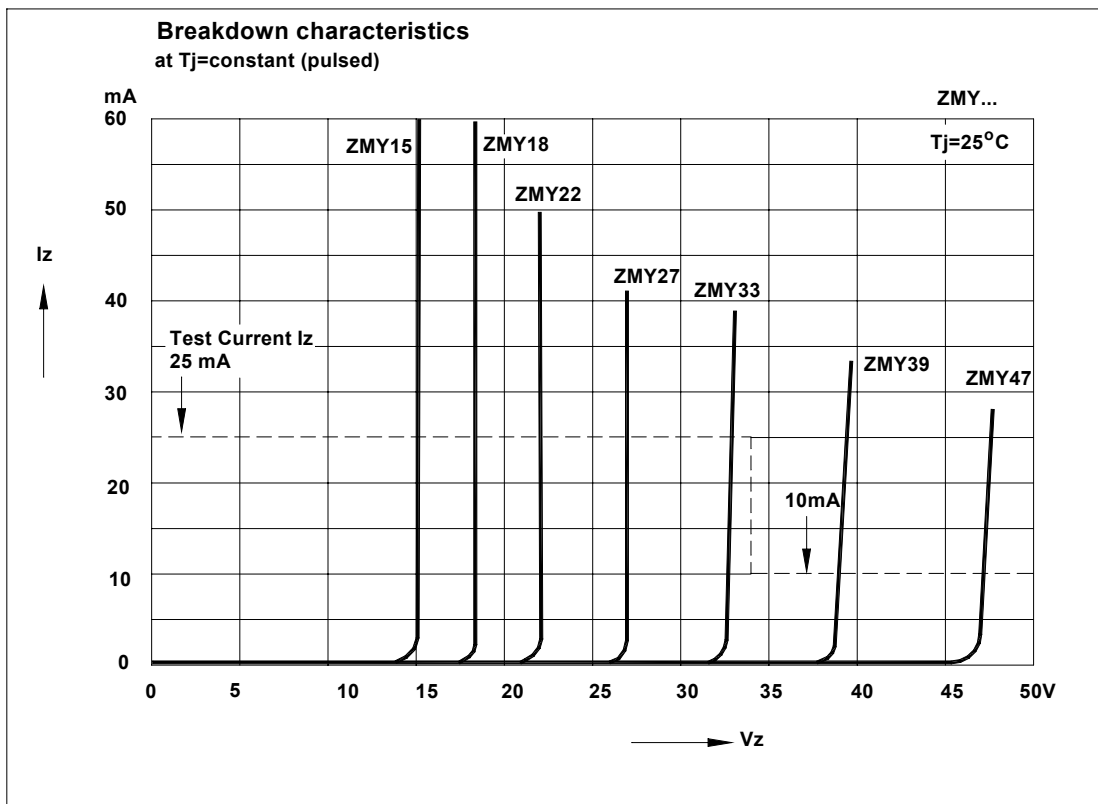
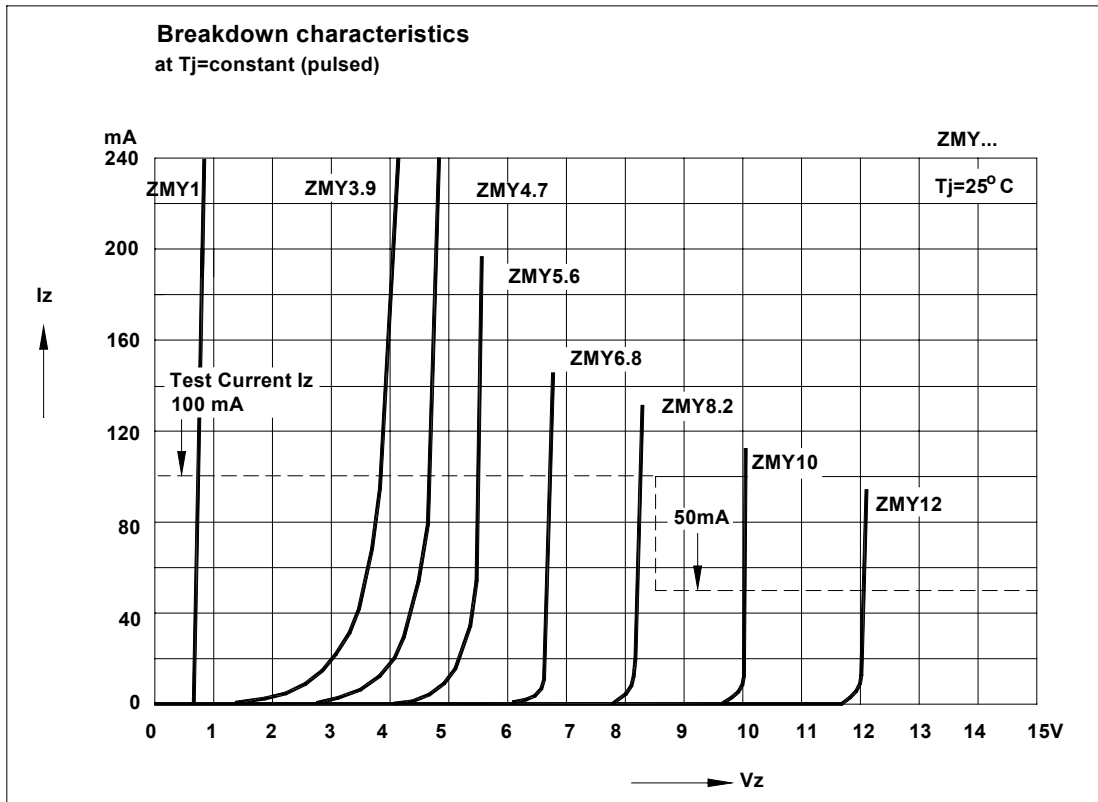
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ISO/TS 16949 : 2002
Certificate No. 05103



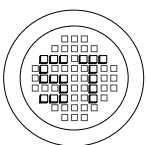
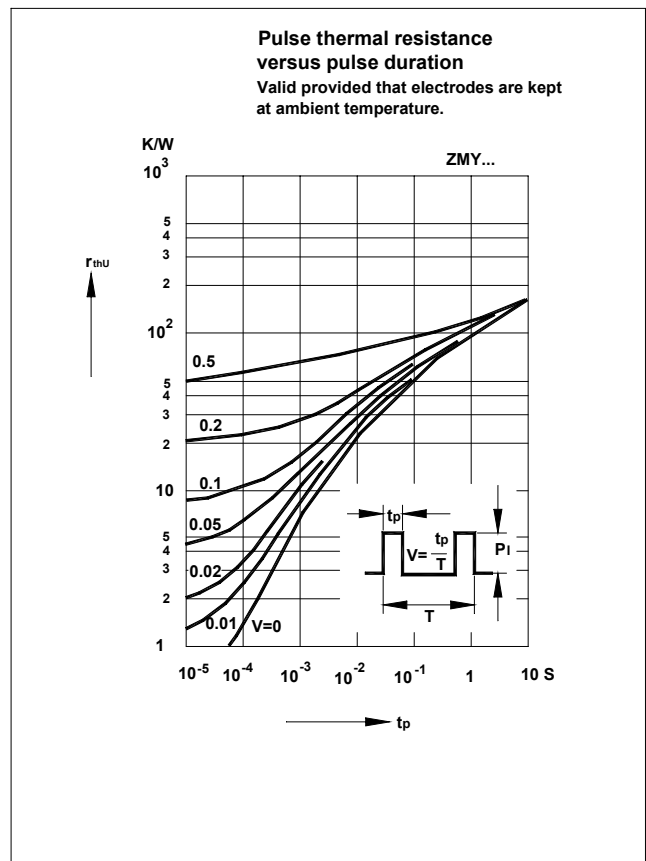
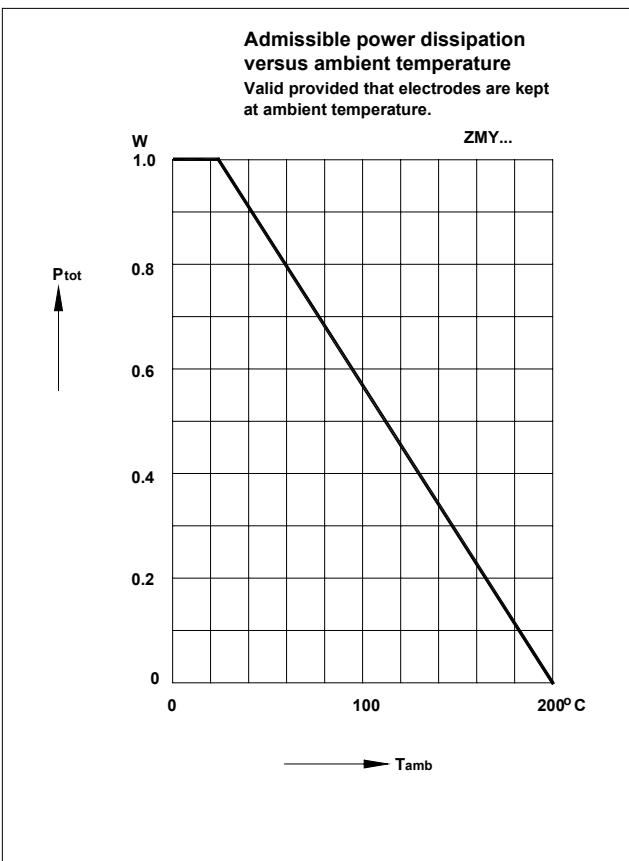
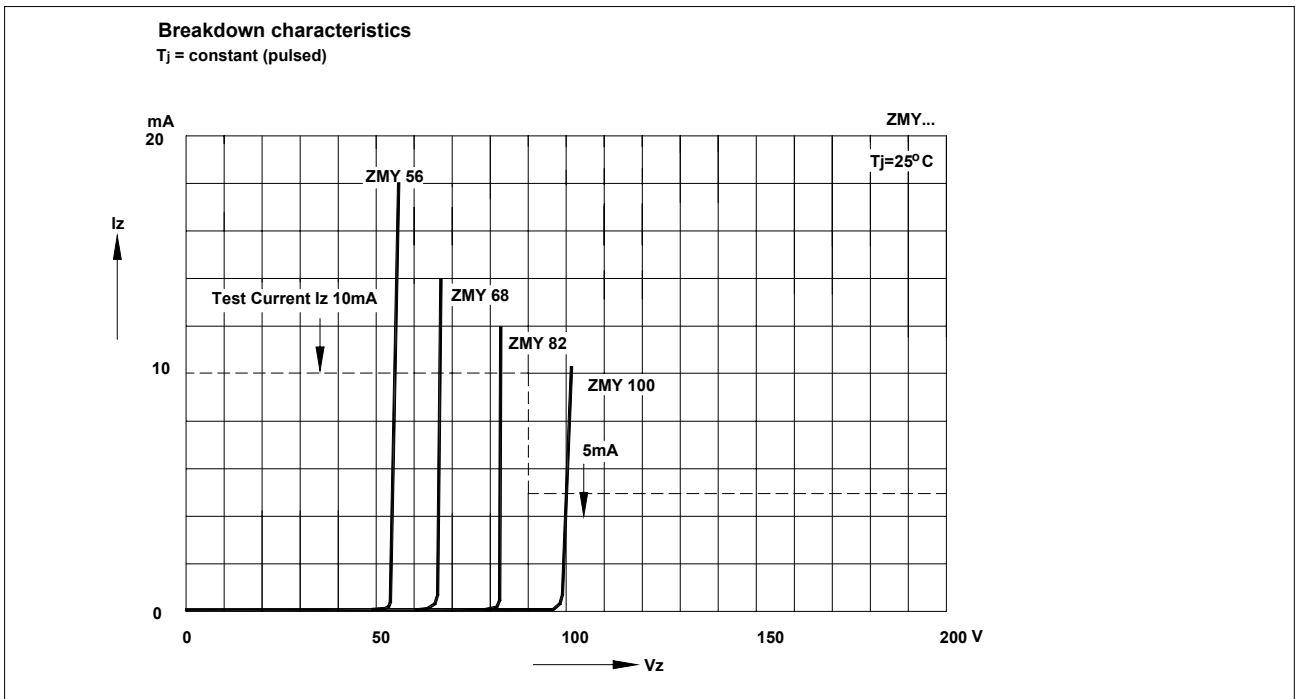
ISO 14001:2004
Certificate No. 7116



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ZMY1...ZMY100(1W)



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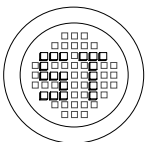
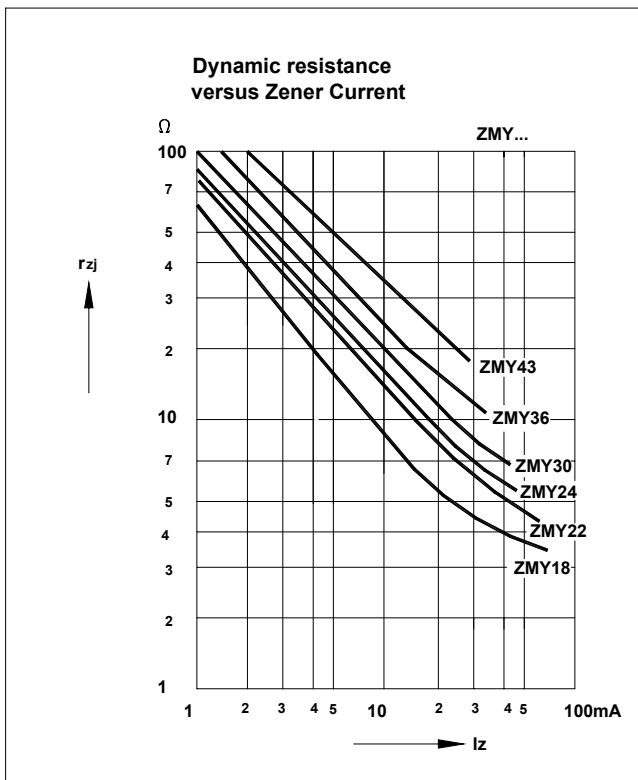
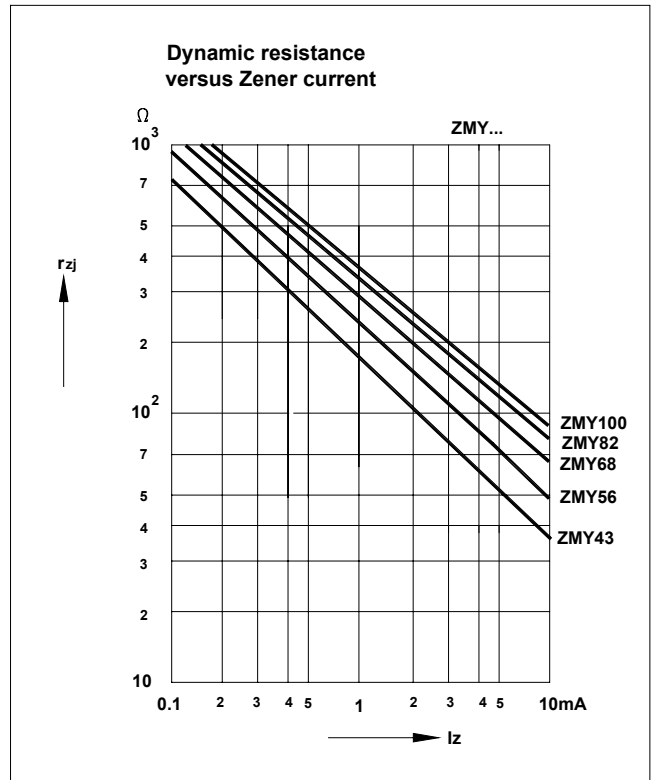
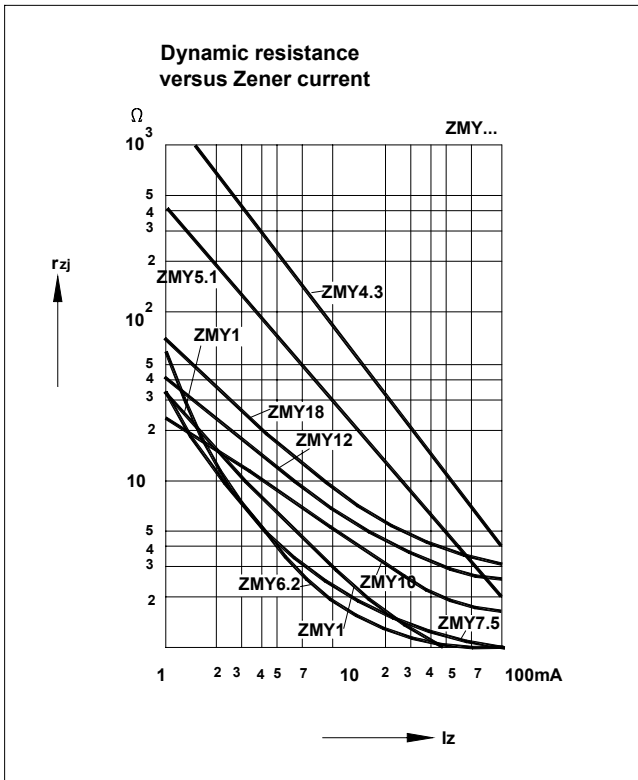
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