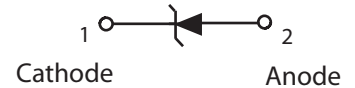


Features

MiniMELF case especially for automatic insertion. The Zener voltages are graded according to the international E24 standard. Smaller voltage tolerances and higher Zener voltages are upon request. Tolerance approximately $\pm 5\%$

LL-34


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

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 175	$^\circ\text{C}$
¹⁾ Valid provided that electrodes are kept at ambient temperature			

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1	V
¹⁾ Valid provided that electrodes are kept at ambient temperature			

500mW SURFACE MOUNT ZENER DIODE

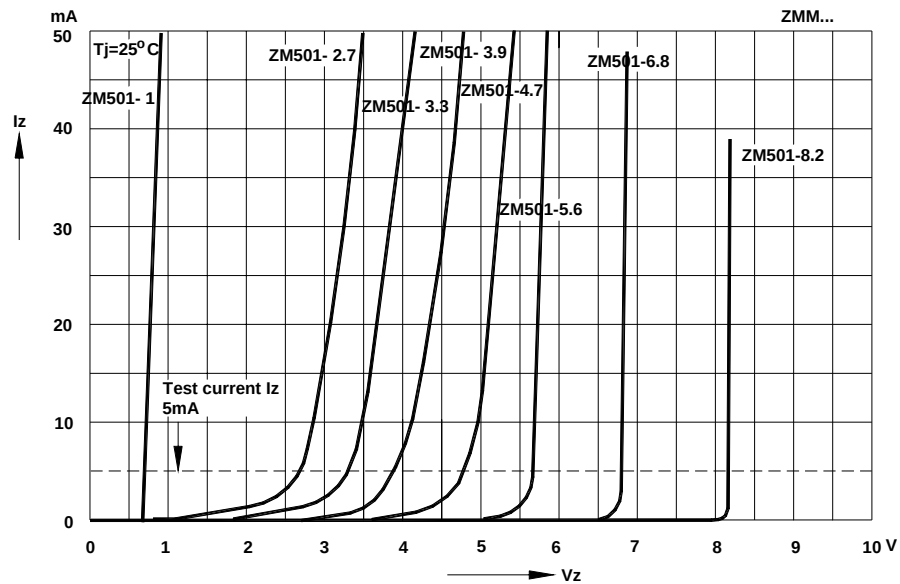
Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage TKvz (%/K)
	V _{Znom}	V _{ZT}	at I _{ZT}	Z _{ZT}	Z _{ZK}	at I _{ZK}	T _a = 25 °C	T _a = 125 °C	at V _R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
ZM501-1 ²⁾	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
ZM501-2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
ZM501-2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
ZM501-2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
ZM501-2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
ZM501-3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
ZM501-3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
ZM501-3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
ZM501-3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
ZM501-4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
ZM501-4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
ZM501-5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
ZM501-5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
ZM501-6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
ZM501-6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
ZM501-7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
ZM501-8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
ZM501-9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
ZM501-10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
ZM501-11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
ZM501-12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
ZM501-13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
ZM501-15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
ZM501-16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
ZM501-18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
ZM501-20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
ZM501-22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
ZM501-24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
ZM501-27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
ZM501-30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
ZM501-33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
ZM501-36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
ZM501-39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
ZM501-43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
ZM501-47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
ZM501-51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
ZM501-56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
ZM501-62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
ZM501-68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
ZM501-75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

¹⁾ Tested with pulses t_p = 20 ms.

²⁾ The ZM501-1 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.

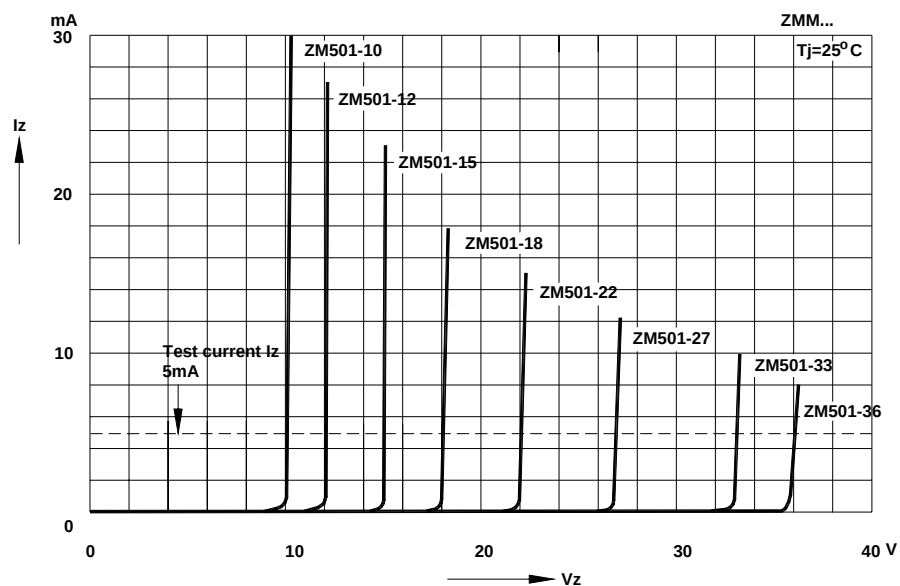
Breakdown characteristics

$T_j = \text{constant (pulsed)}$

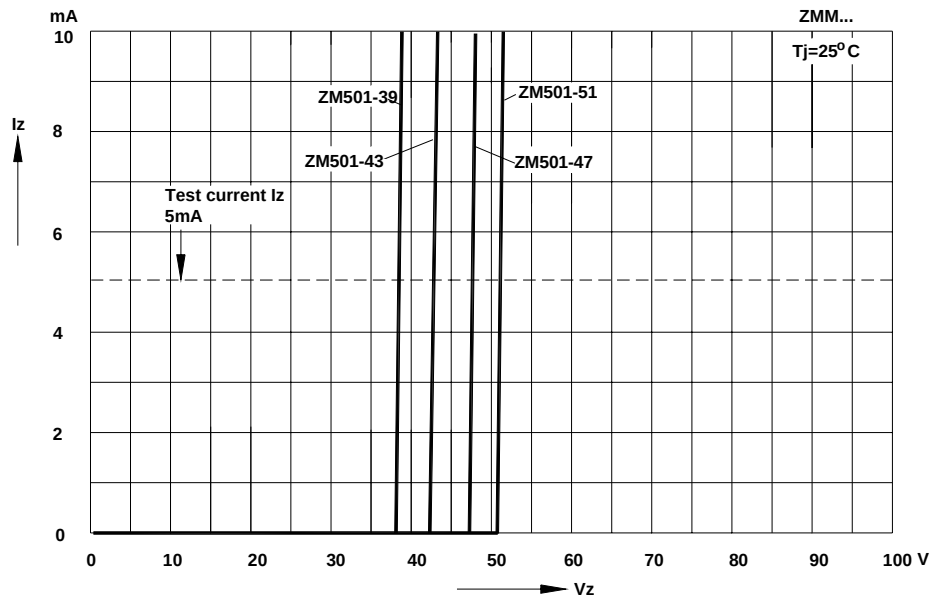


Breakdown characteristics

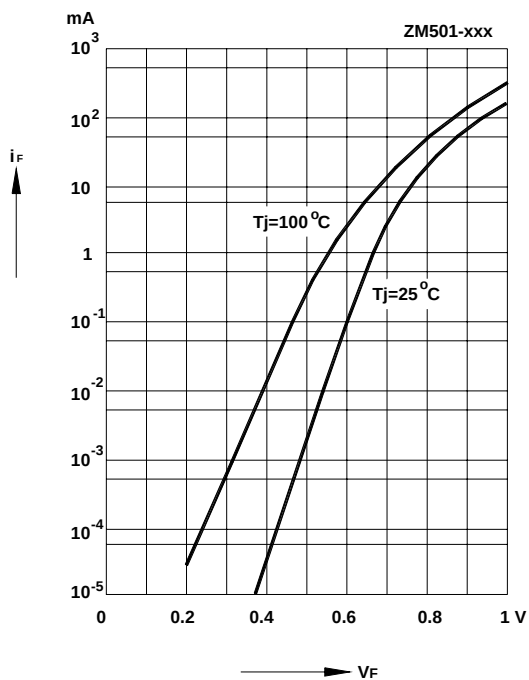
$T_j = \text{constant (pulsed)}$



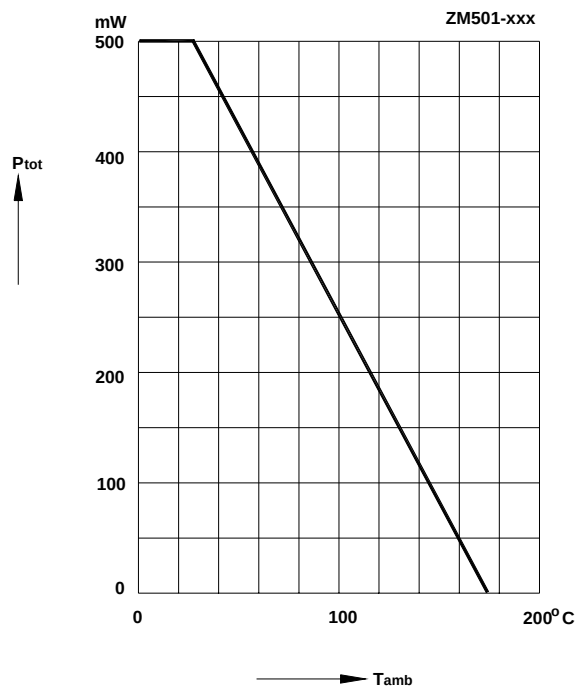
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



Forward characteristics

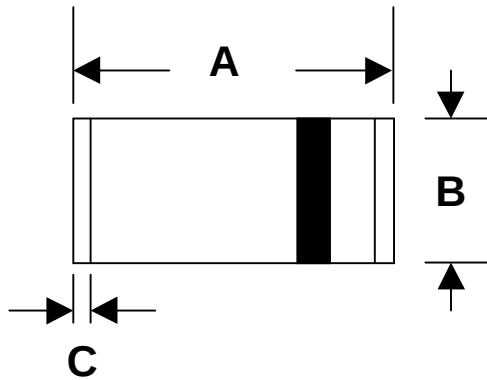


Admissible power dissipation versus ambient temperature
 Valid provided that electrodes are kept at ambient temperature.



Dimension outline Unit:mm

LL-34



MiniMELF		
Dim	Min	Max
A	3.30	3.60
B	1.40	1.50
C	0.25	0.33