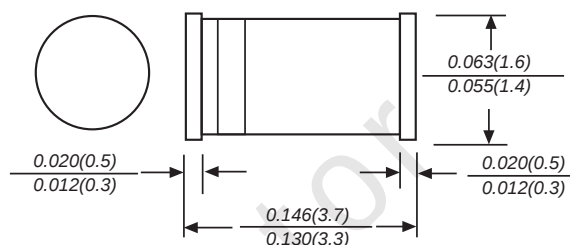


FEATURE

In MiniMELF case especially for automatic insertion.
These diodes are also available in DO-35 case with the type designation BZX55C...

LL-34



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	$R_{\theta JA}$	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

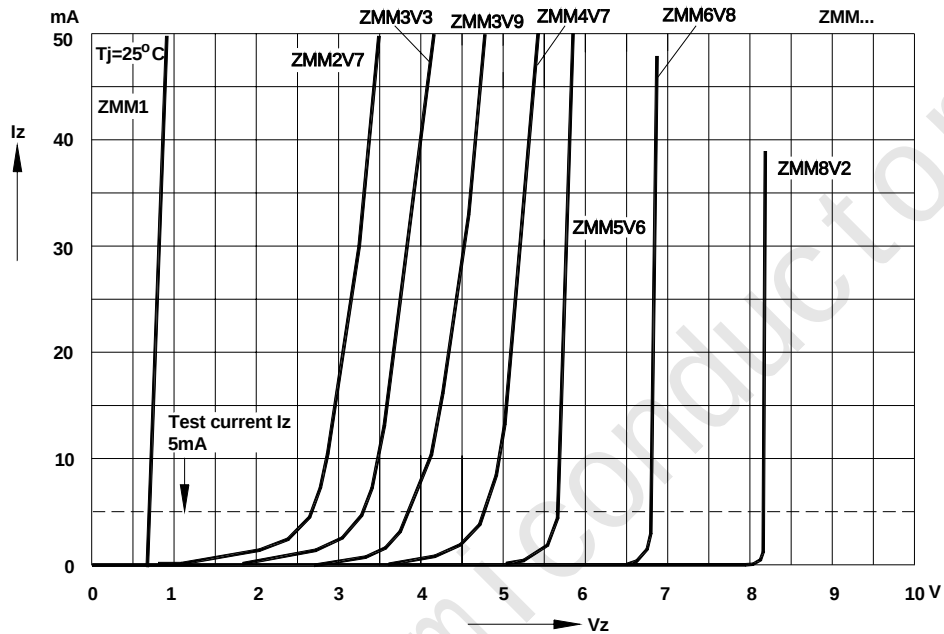
Electrical Characteristics @ T_A = 25°C unless otherwise specified

Type Number	Nominal Zener Voltage (Note 1)		Zener Voltage Range	Maximum Zener Impedance	Maximum Zener Impedance		Maximum Leakage Current @ V _R			Temperature Coefficient
	V _Z @ I _{ZT}		V _Z @ I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ T _J = 25°C	I _R @ T _J = 150°C	V _R	
	(V)	(mA)	(V)	(Ω)	(Ω)	(mA)	(μA)	(μA)	(V)	
ZMM2V4	2.4	5.0	2.28 to 2.56	85	600	1.0	50	100	1.0	-0.09 to -0.06
ZMM2V7	2.7	5.0	2.5 to 2.9	85	600	1.0	10	50	1.0	-0.09 to -0.06
ZMM3V0	3.0	5.0	2.8 to 3.2	90	600	1.0	4.0	40	1.0	-0.08 to -0.05
ZMM3V3	3.3	5.0	3.1 to 3.5	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
ZMM3V6	3.6	5.0	3.4 to 3.8	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
ZMM3V9	3.9	5.0	3.7 to 4.1	90	600	1.0	2.0	40	1.0	-0.08 to -0.05
ZMM4V3	4.3	5.0	4.0 to 4.6	90	600	1.0	1.0	20	1.0	-0.06 to -0.03
ZMM4V7	4.7	5.0	4.4 to 5.0	80	600	1.0	0.5	10	1.0	-0.05 to +0.02
ZMM5V1	5.1	5.0	4.8 to 5.4	60	550	1.0	0.1	2.0	1.0	-0.02 to +0.02
ZMM5V6	5.6	5.0	5.2 to 6.0	40	450	1.0	0.1	2.0	1.0	-0.05 to +0.05
ZMM6V2	6.2	5.0	5.8 to 6.6	10	200	1.0	0.1	2.0	2.0	0.03 to 0.06
ZMM6V8	6.8	5.0	6.4 to 7.2	8.0	150	1.0	0.1	2.0	3.0	0.03 to 0.07
ZMM7V5	7.5	5.0	7.0 to 7.9	7.0	50	1.0	0.1	2.0	5.0	0.03 to 0.07
ZMM8V2	8.2	5.0	7.7 to 8.7	7.0	50	1.0	0.1	2.0	6.2	0.03 to 0.08
ZMM9V1	9.1	5.0	8.5 to 9.6	10	50	1.0	0.1	2.0	6.8	0.03 to 0.09
ZMM10	10	5.0	9.4 to 10.6	15	70	1.0	0.1	2.0	7.5	0.03 to 0.10
ZMM11	11	5.0	10.4 to 11.6	20	70	1.0	0.1	2.0	8.2	0.03 to 0.11
ZMM12	12	5.0	11.4 to 12.7	20	90	1.0	0.1	2.0	9.1	0.03 to 0.11
ZMM13	13	5.0	12.4 to 14.1	26	110	1.0	0.1	2.0	10	0.03 to 0.11
ZMM15	15	5.0	13.8 to 15.6	30	110	1.0	0.1	2.0	11	0.03 to 0.11
ZMM16	16	5.0	15.3 to 17.1	40	170	1.0	0.1	2.0	12	0.03 to 0.11
ZMM18	18	5.0	16.8 to 19.1	50	170	1.0	0.1	2.0	13	0.03 to 0.11
ZMM20	20	5.0	18.8 to 21.2	55	220	1.0	0.1	2.0	15	0.03 to 0.11
ZMM22	22	5.0	20.8 to 23.3	55	220	1.0	0.1	2.0	16	0.04 to 0.12
ZMM24	24	5.0	22.8 to 25.6	80	220	1.0	0.1	2.0	18	0.04 to 0.12
ZMM27	27	5.0	25.1 to 28.9	80	220	1.0	0.1	2.0	20	0.04 to 0.12
ZMM30	30	5.0	28 to 32	80	220	1.0	0.1	2.0	22	0.04 to 0.12
ZMM33	33	5.0	31 to 35	80	220	1.0	0.1	2.0	24	0.04 to 0.12
ZMM36	36	5.0	34 to 38	80	220	1.0	0.1	2.0	27	0.04 to 0.12
ZMM39	39	2.5	37 to 41	90	500	0.5	0.1	5.0	30	0.04 to 0.12
ZMM43	43	2.5	40 to 46	90	600	0.5	0.1	5.0	33	0.04 to 0.12
ZMM47	47	2.5	44 to 50	110	700	0.5	0.1	5.0	36	0.04 to 0.12
ZMM51	51	2.5	48 to 54	125	700	0.5	0.1	10	39	0.04 to 0.12
ZMM56	56	2.5	52 to 60	135	1000	0.5	0.1	10	43	0.04 to 0.12
ZMM62	62	2.5	58 to 66	150	1000	0.5	0.1	10	47	0.04 to 0.12
ZMM68	68	2.5	64 to 72	200	1000	0.5	0.1	10	51	0.04 to 0.12
ZMM75	75	2.5	70 to 79	250	1500	0.5	0.1	10	56	0.04 to 0.12

Notes: 1. Tested with pulses t_p = 20 ms.
2. Valid provided that electrodes are kept at ambient temperature.

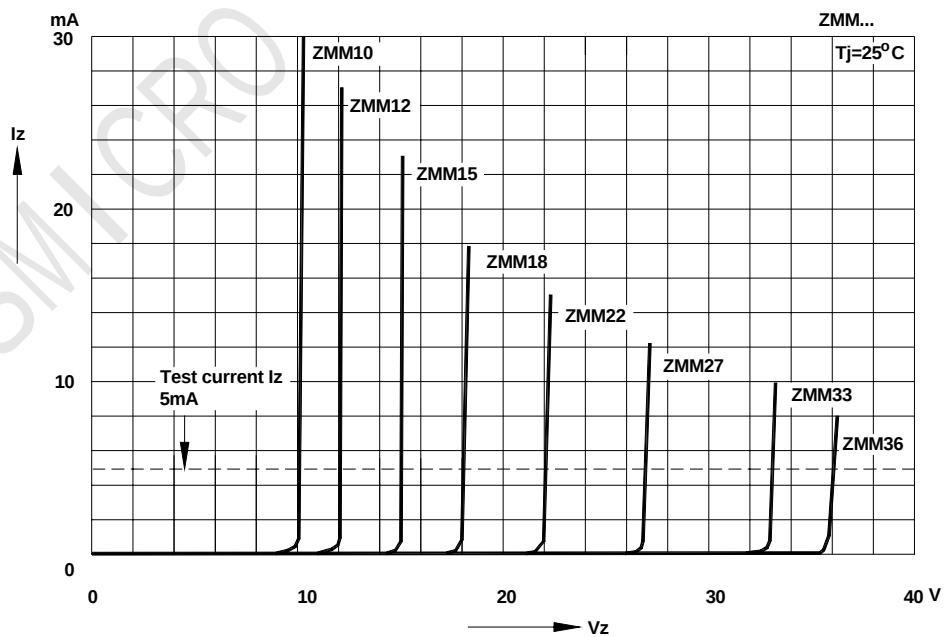
Breakdown characteristics

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

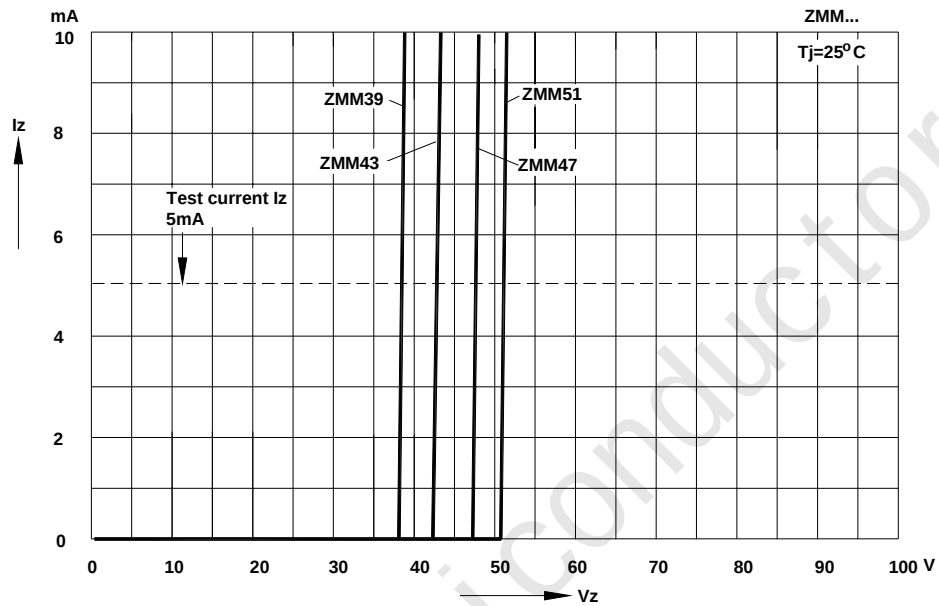


Breakdown characteristics

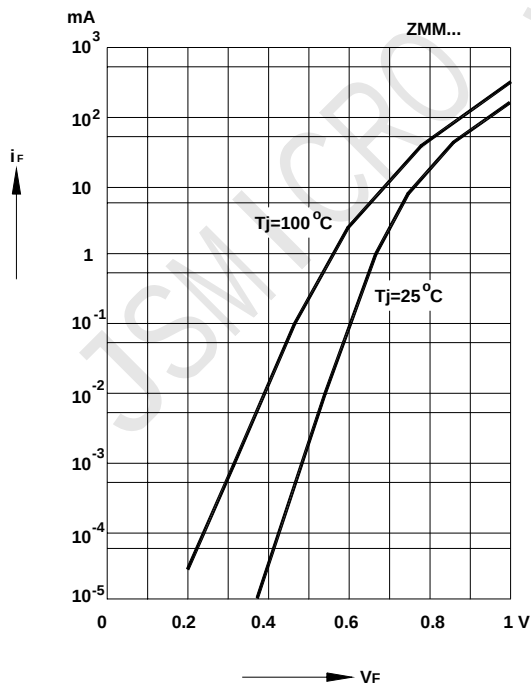
$T_j = \text{constant (pulsed)}$



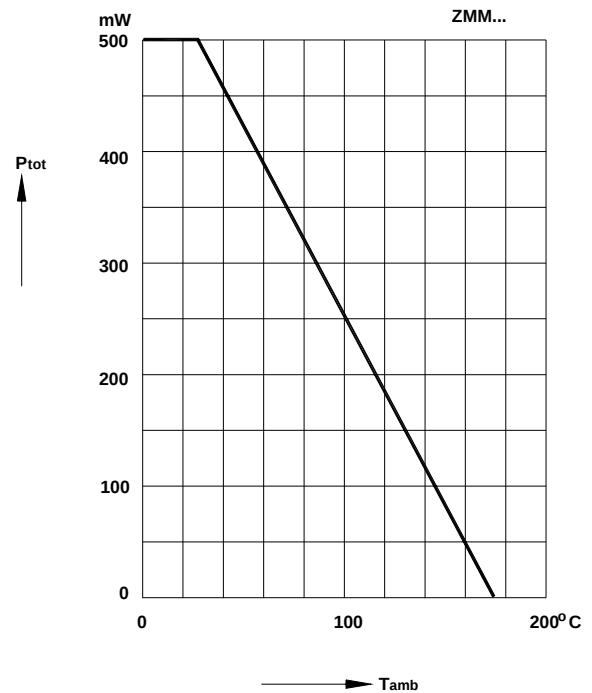
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$

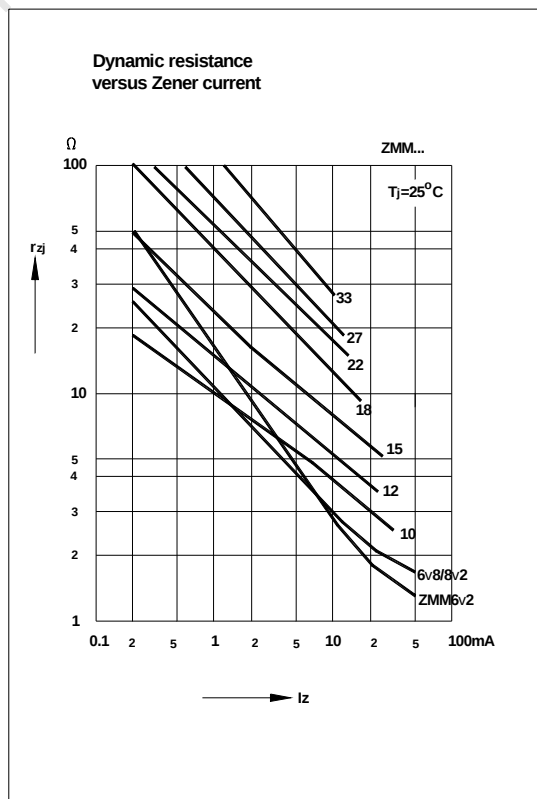
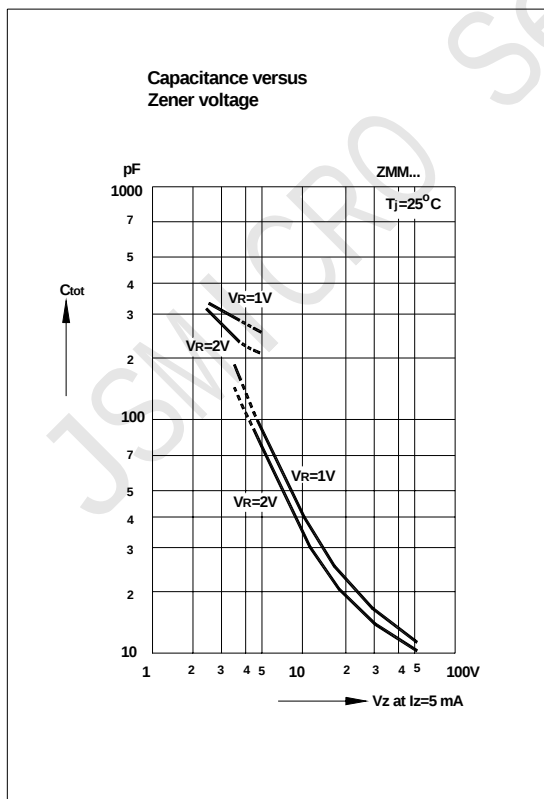
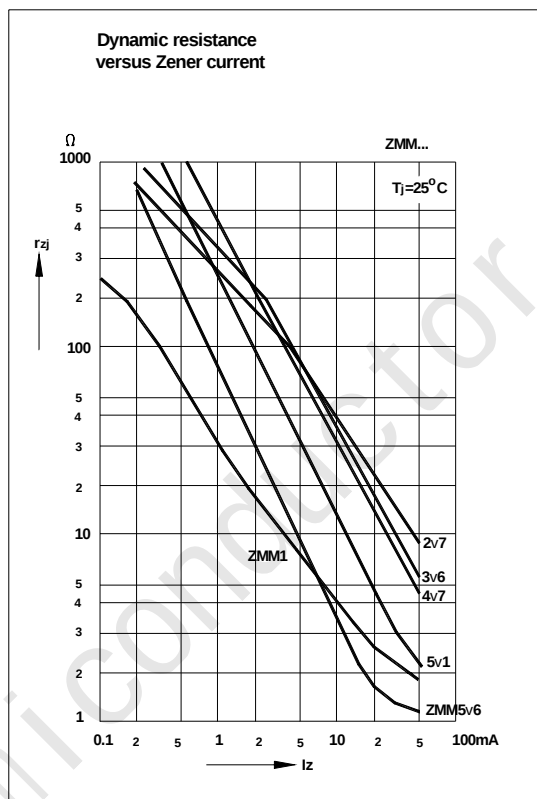
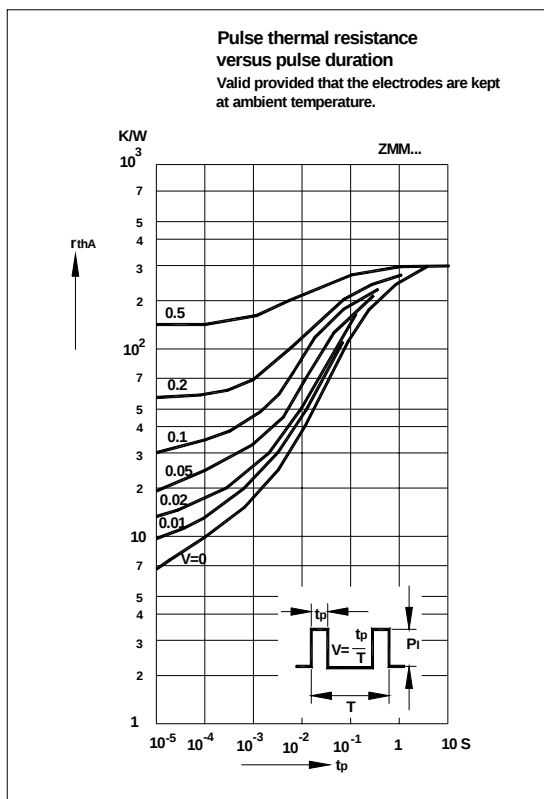


Forward characteristics

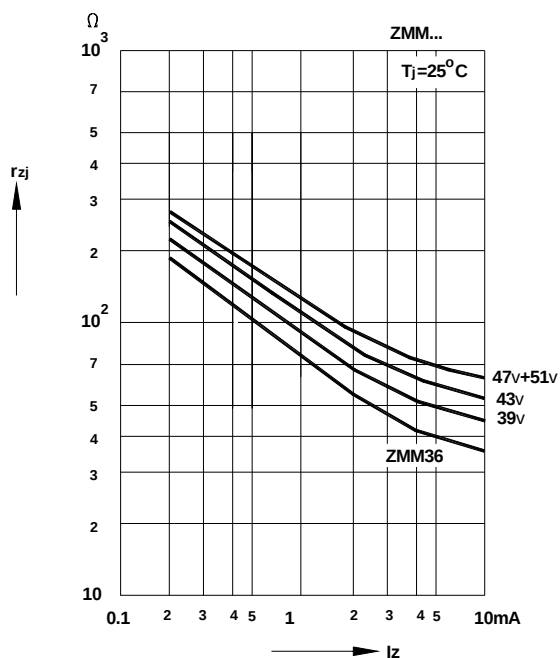


Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature.



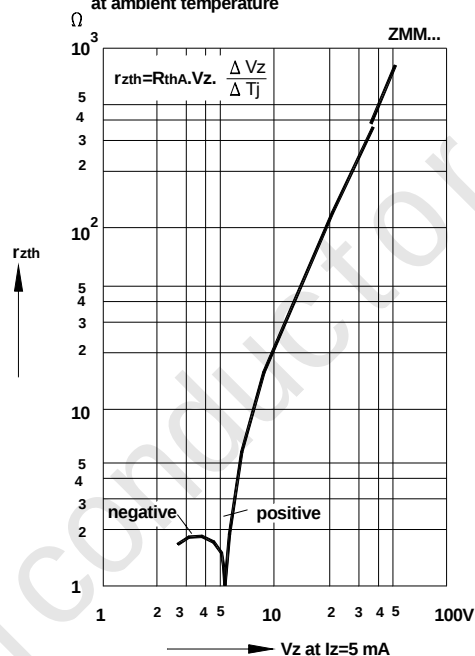


Dynamic resistance versus Zener current

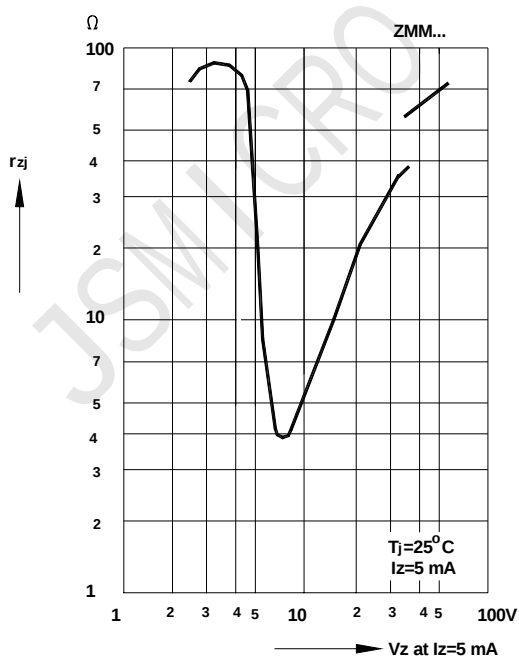


Thermal differential resistance versus Zener voltage

Valid provided that electrodes are kept at ambient temperature



Dynamic resistance versus Zener voltage



Temperature dependence of Zener voltage versus Zener voltage

