



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. These diodes are also available in DO-35 case with the type designation BZX55C.



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

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

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F=100\text{mA}$	V_F	1	V
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	300	$^\circ\text{C/W}$

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



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

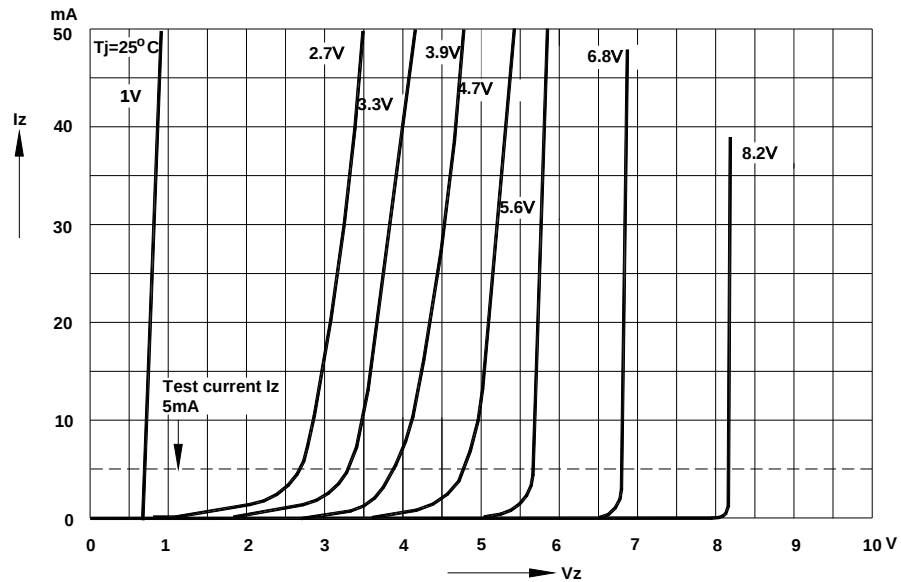
Type	Zener Voltage Range ¹⁾			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK}	at I_{ZK}	$T_a = 25^\circ\text{C}$	$T_a = 125^\circ\text{C}$	at V_R	
	(V)	(V)	(mA)	Max. (Ω)	Max. (Ω)	(mA)	Max. (μA)	Max. (μA)	(V)	
ZMM1B ²⁾	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
ZMM2V0B	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
ZMM2V2B	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
ZMM2V4B	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
ZMM2V7B	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
ZMM3V0B	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
ZMM3V3B	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3V6B	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
ZMM3V9B	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
ZMM4V3B	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
ZMM4V7B	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
ZMM5V1B	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
ZMM5V6B	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
ZMM6V2B	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
ZMM6V8B	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
ZMM7V5B	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
ZMM8V2B	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
ZMM9V1B	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
ZMM10B	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
ZMM11B	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
ZMM12B	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
ZMM13B	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
ZMM15B	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
ZMM16B	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
ZMM18B	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
ZMM20B	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
ZMM22B	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
ZMM24B	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
ZMM27B	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
ZMM30B	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
ZMM33B	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
ZMM36B	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
ZMM39B	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
ZMM43B	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
ZMM47B	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
ZMM51B	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
ZMM56B	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
ZMM62B	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
ZMM68B	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
ZMM75B	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.

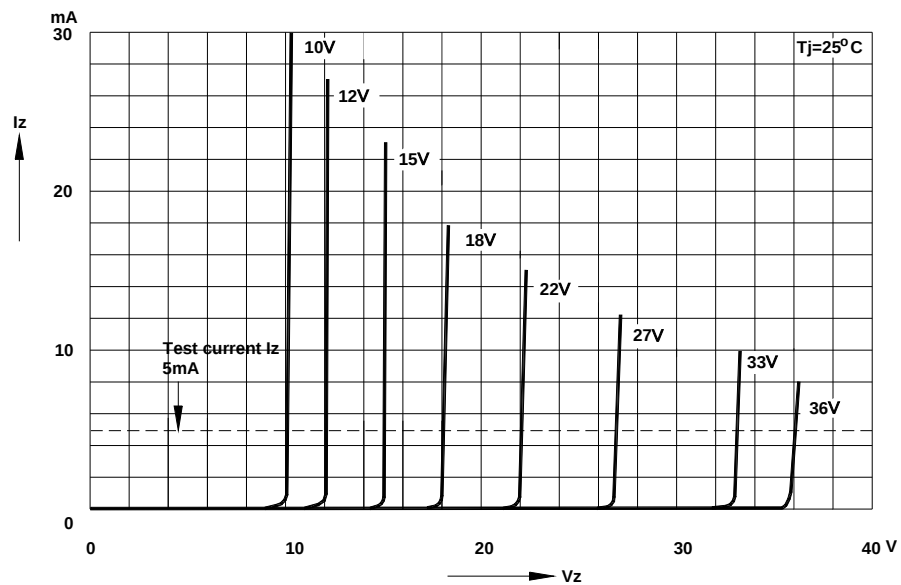
²⁾ The ZMM1 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.



Typical Characteristics

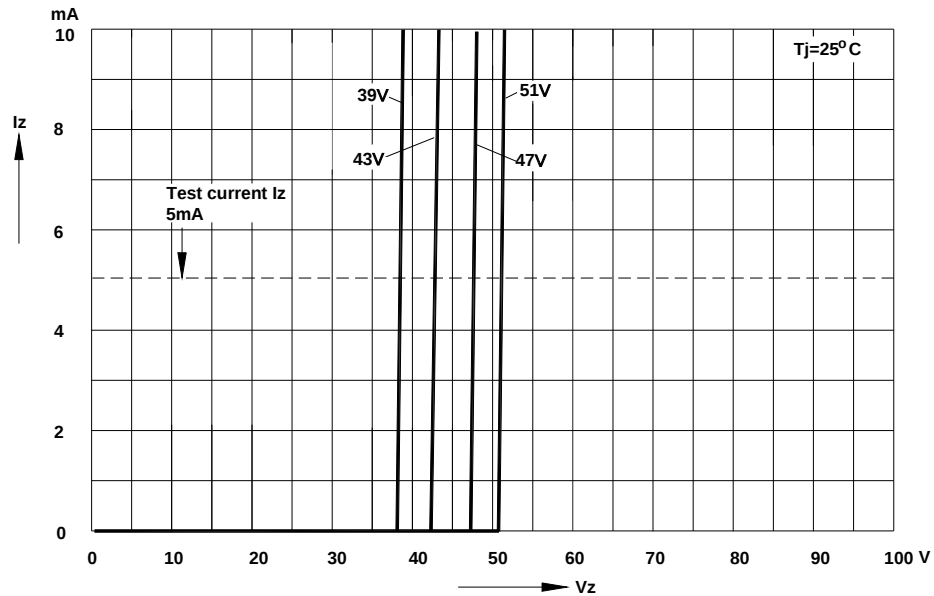


Breakdown characteristics
 $T_j = \text{constant}$ (pulsed)

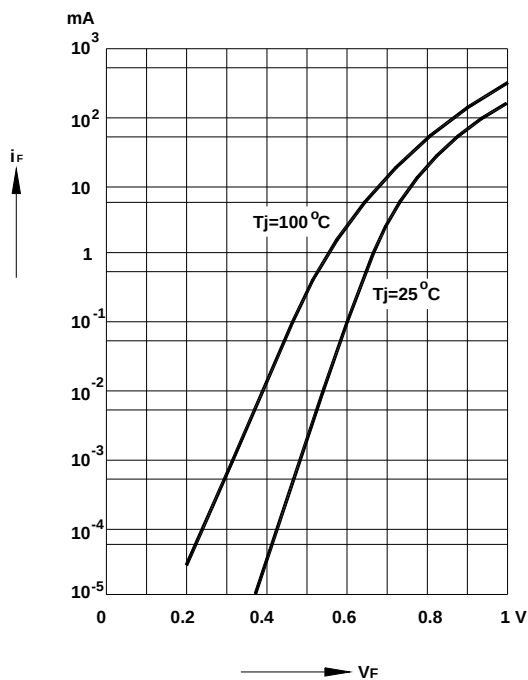




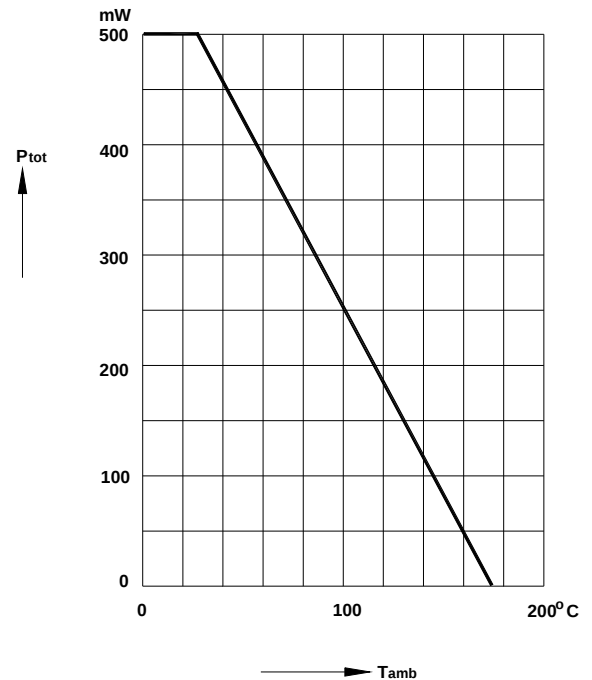
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



Forward characteristics

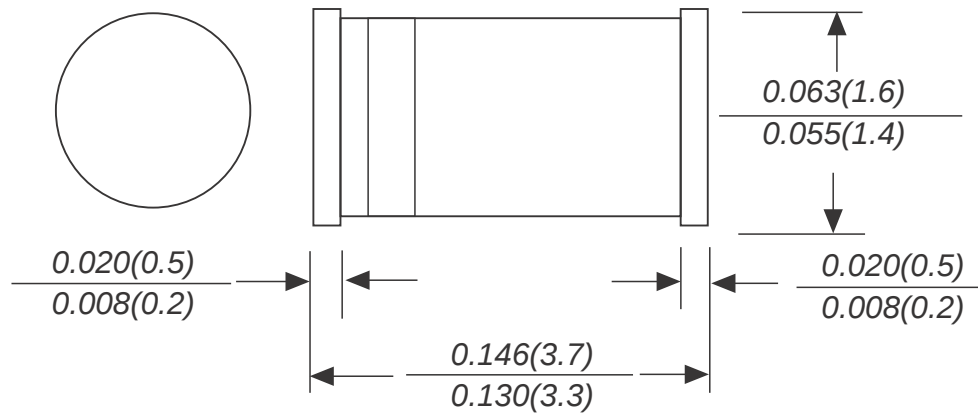


Admissible power dissipation
versus ambient temperature
Valid provided that electrodes are kept
at ambient temperature.





LL-34 Package Information



Dimensions in inches and (millimeters)



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