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 and may be delivered with the type designation ZMMXXX.

The diodes additionally are available in DO-35 case with the type designation BZX55-CXXX.

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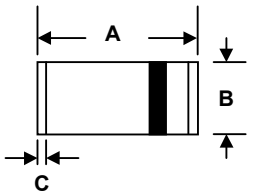


MiniMELF		
Dim	**Min**	**Max**
A	3.30	3.60
B	1.40	1.50
C	0.25	0.33
All Dimensions in mm		

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	500 [1]	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 55 to + 175	°C
[1] Valid provided that electrodes are kept at ambient temperature			

Characteristics at T_a = 25 °C

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

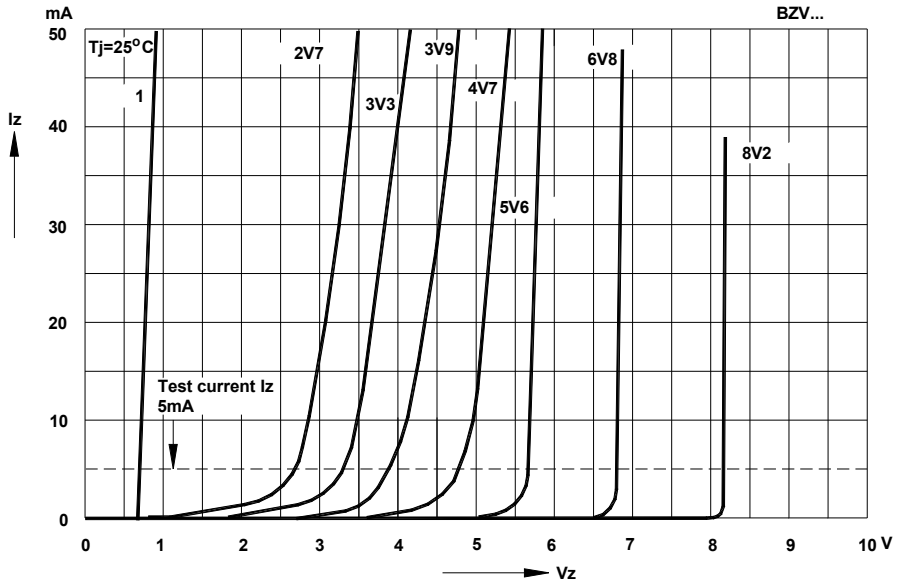
Characteristics at T_a = 25 °C

Type	Zener Voltage Range [1]			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	V_{Znom}	V_{ZT}	at I_{ZT}	Z_{ZT}	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)	TKvz (%/K)
BZV55-C1[2]	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
BZV55-C2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
BZV55-C2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
BZV55-C2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
BZV55-C2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
BZV55-C3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
BZV55-C3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
BZV55-C4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
BZV55-C5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
BZV55-C5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
BZV55-C6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
BZV55-C6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
BZV55-C7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
BZV55-C8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
BZV55-C9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
BZV55-C10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
BZV55-C11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
BZV55-C12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
BZV55-C13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
BZV55-C15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
BZV55-C16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
BZV55-C18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
BZV55-C20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
BZV55-C22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
BZV55-C24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
BZV55-C27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
BZV55-C30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
BZV55-C33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
BZV55-C36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
BZV55-C39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZV55-C43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZV55-C47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZV55-C51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZV55-C56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZV55-C62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZV55-C68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZV55-C75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

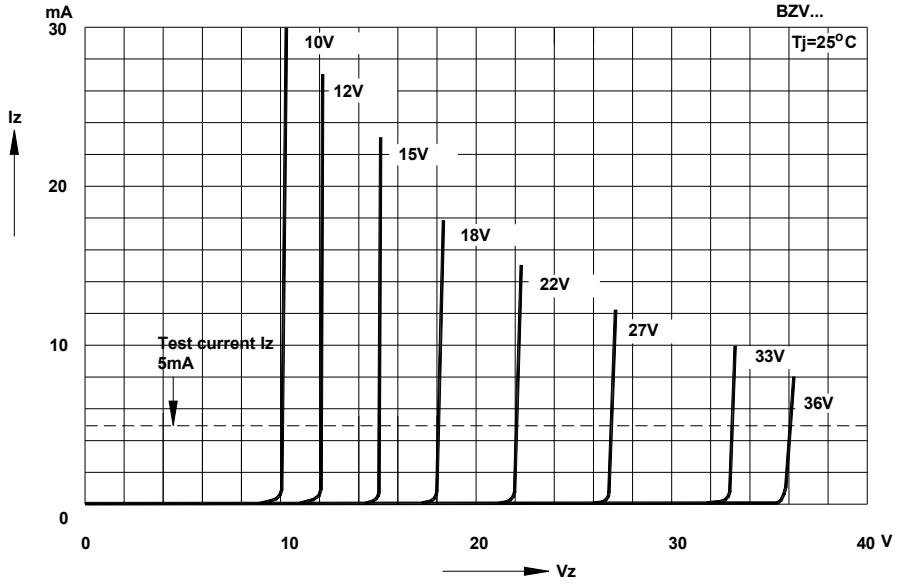
[1] Tested with pulses t_p = 20 ms.

[2] The BZV55-1 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 = constant (pulsed)

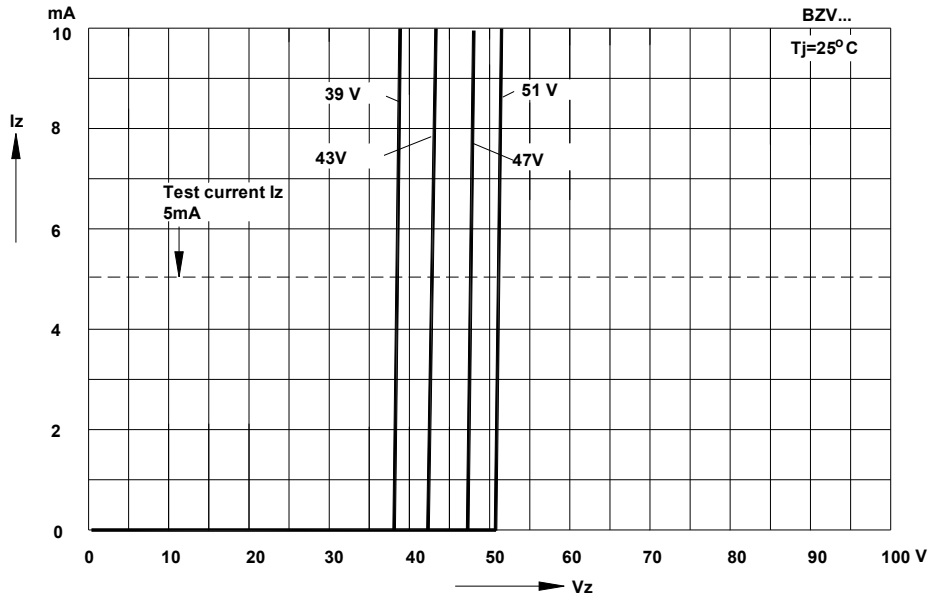


Breakdown characteristics
T_j = constant (pulsed)

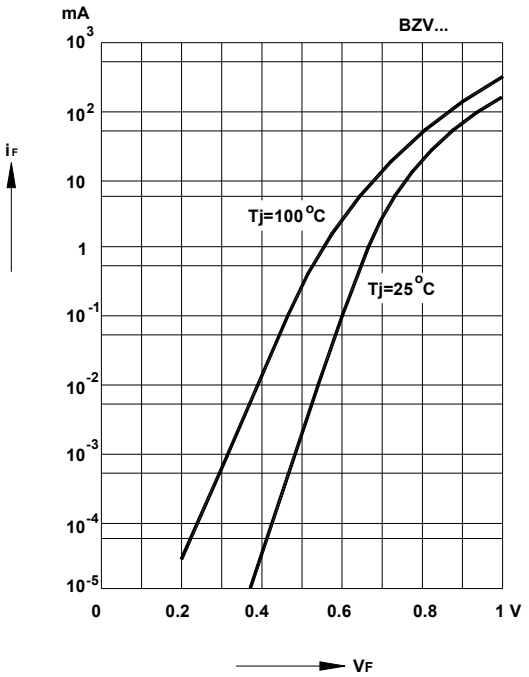


Breakdown characteristics

T_j = constant (pulsed)



Forward characteristics



Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature.