



## 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 BZV55Cxx...



LL-34

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

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

## Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient <sup>1)</sup>	$R_{\theta\text{JA}}$	300	$^\circ\text{C/W}$

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.



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

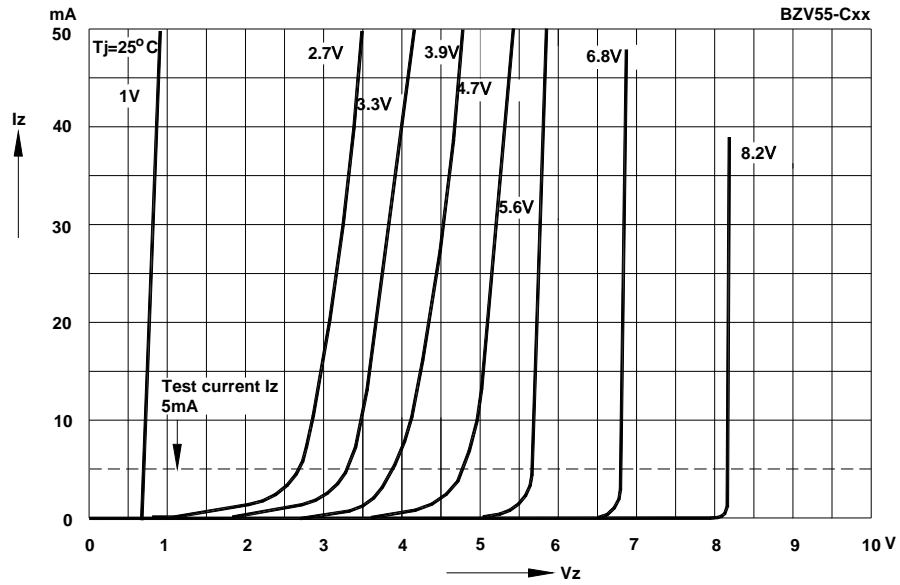
Type	Zener Voltage Range <sup>1)</sup>			Dynamic Resistance			Reverse Leakage Current			Temp. Coefficient of Zener Voltage
	$V_{Znom}$ (V)	$V_{ZT}$ (V)	at $I_{ZT}$ (mA)	$Z_{ZT}$ Max. ( $\Omega$ )	$Z_{ZK}$ Max. ( $\Omega$ )	at $I_{ZK}$ (mA)	$T_a = 25\text{ }^\circ\text{C}$ Max. ( $\mu\text{A}$ )	$T_a = 125\text{ }^\circ\text{C}$ Max. ( $\mu\text{A}$ )	at $V_R$ (V)	TKvz (%/K)
BZV55C1 <sup>2)</sup>	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
BZV55C2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
BZV55C2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
BZV55C2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
BZV55C2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
BZV55C3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
BZV55C3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
BZV55C4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
BZV55C4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
BZV55C5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
BZV55C5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
BZV55C6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
BZV55C6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
BZV55C7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
BZV55C8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
BZV55C9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
BZV55C10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
BZV55C11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
BZV55C12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
BZV55C13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
BZV55C15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
BZV55C16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
BZV55C18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
BZV55C20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
BZV55C22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
BZV55C24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
BZV55C27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
BZV55C30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
BZV55C33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
BZV55C36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
BZV55C39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZV55C43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZV55C47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZV55C51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZV55C56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZV55C62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZV55C68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZV55C75	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$ .

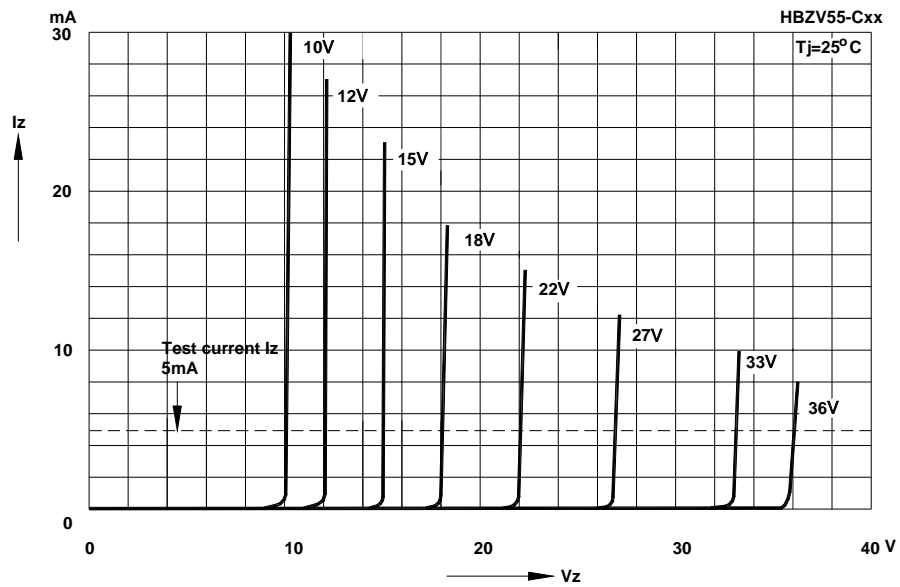
<sup>2)</sup> The ZMM1 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.



### Typical Characteristics

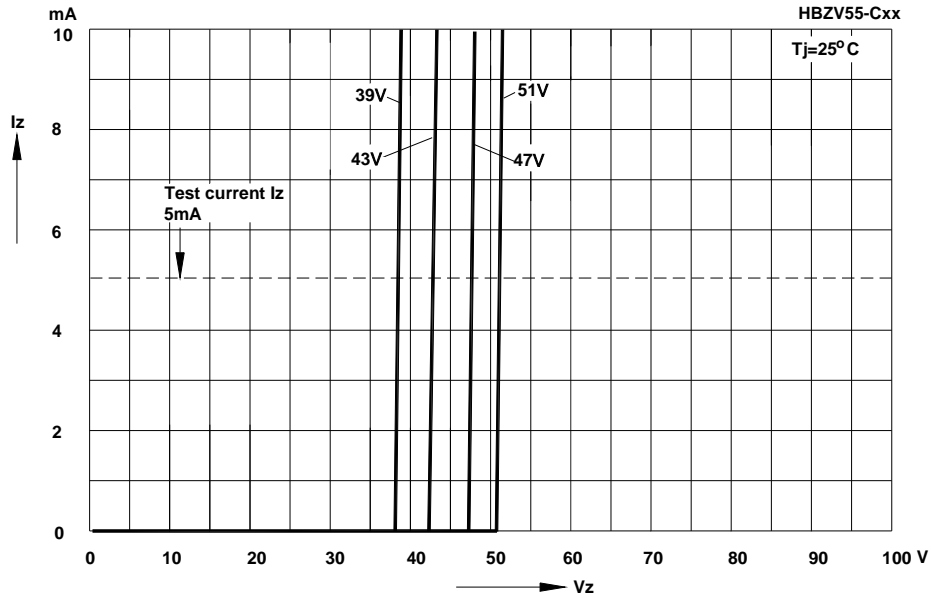


**Breakdown characteristics**  
 $T_j = \text{constant (pulsed)}$

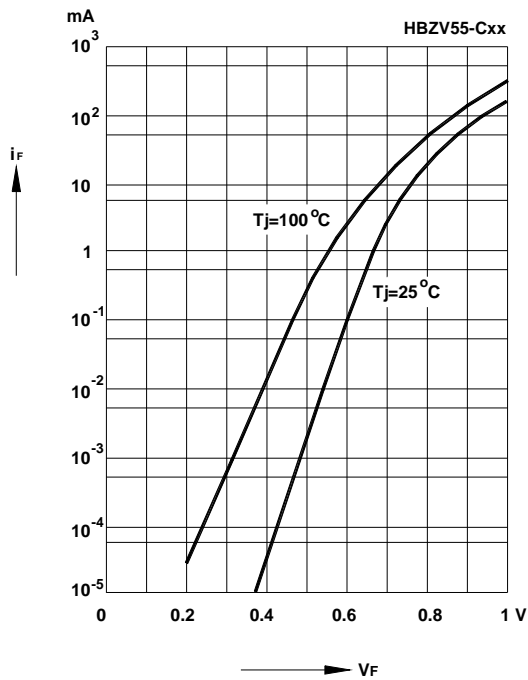




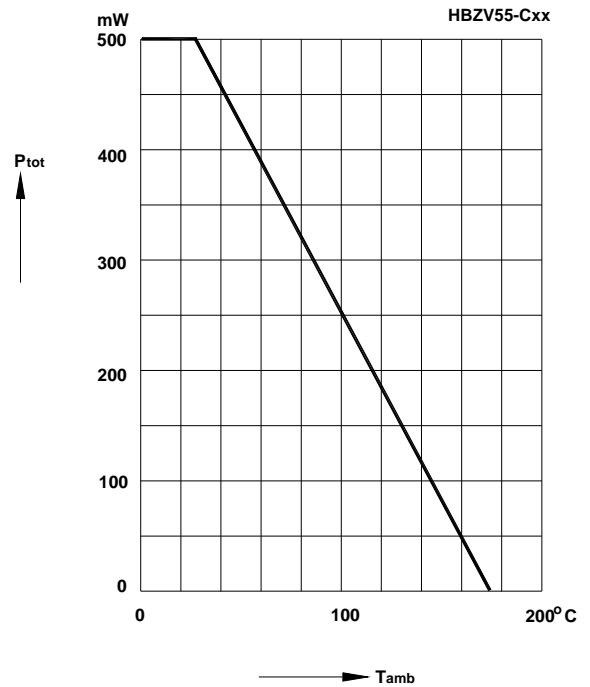
**Breakdown characteristics**  
 $T_j = \text{constant (pulsed)}$



**Forward characteristics**

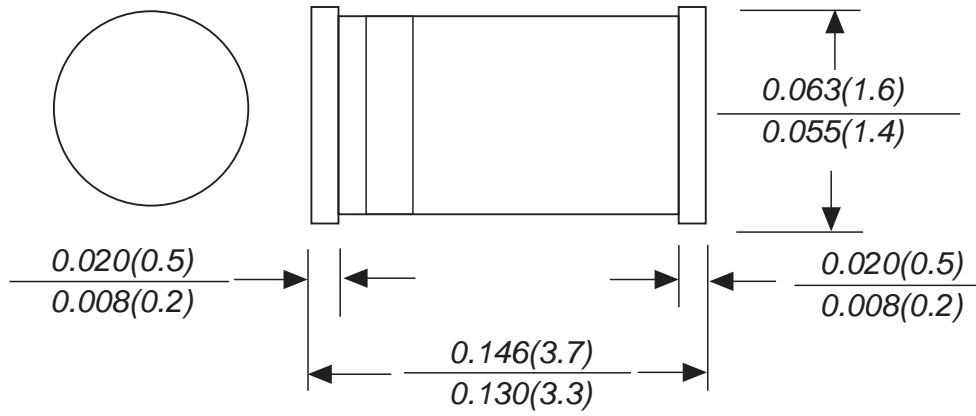


**Admissible power dissipation versus ambient temperature**  
Valid provided that electrodes are kept at ambient temperature.





### LL-34 Package Information



*Dimensions in inches and (millimeters)*



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