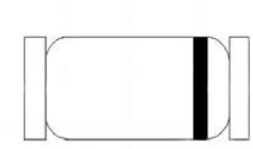
HBZV55-Cxx
Silicon Epitaxial Planar Zener Diodes

Features

MiniMELF case especially for automatic insertion. The Zener voltages are graded according to theinternational E24 standard. Smaller voltage tolerancesand higher Zener voltages are upon request. These diodes are also available in DO-35 case withthe type designation HBZX55C...



LL-34

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Power Dissipation [1)]	P_{tot}	500	mW
Junction Temperature	T_j	175	℃
Storage Temperature Range	T_{stg}	- 55 to + 175	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient [1)]	$R_{\theta JA}$	300	℃/W

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

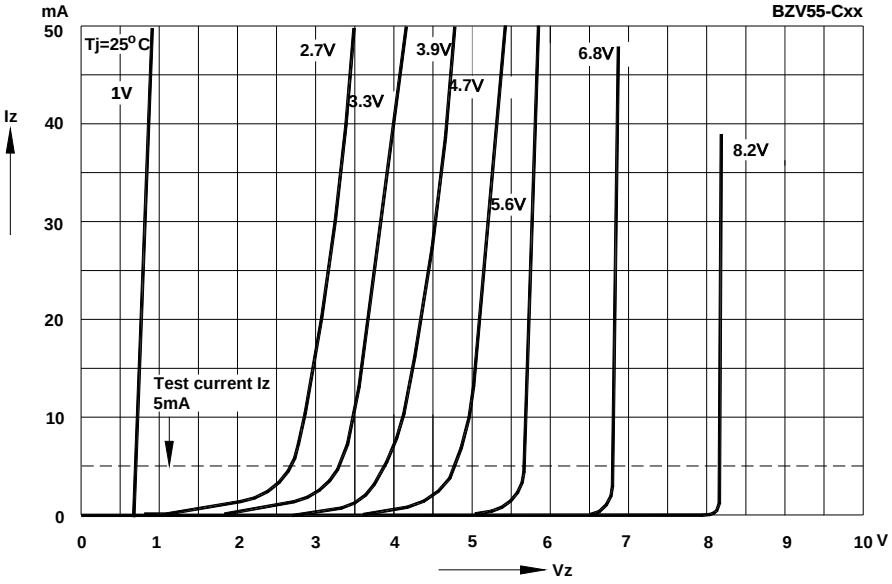
Characteristics at T_a = 25 °C

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)
HBZV55-C1[2]	0.75	0.7...0.8	5	8	50	1	-	-	-	-0.26...-0.23
HBZV55-C2V0	2	1.8...2.15	5	85	600	1	100	200	1	-0.09...-0.06
HBZV55-C2V2	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
HBZV55-C2V4	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
HBZV55-C2V7	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
HBZV55-C3V0	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
HBZV55-C3V3	3.3	3.1...3.5	5	85	600	1	2	40	1	-0.08...-0.05
HBZV55-C3V6	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
HBZV55-C3V9	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
HBZV55-C4V3	4.3	4...4.6	5	75	600	1	1	20	1	-0.06...-0.03
HBZV55-C4V7	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
HBZV55-C5V1	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02...+0.02
HBZV55-C5V6	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
HBZV55-C6V2	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
HBZV55-C6V8	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
HBZV55-C7V5	7.5	7...7.9	5	7	50	1	0.1	2	5	0.03...0.07
HBZV55-C8V2	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
HBZV55-C9V1	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
HBZV55-C10	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03...0.1
HBZV55-C11	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
HBZV55-C12	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
HBZV55-C13	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
HBZV55-C15	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
HBZV55-C16	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
HBZV55-C18	18	16.8...19.1	5	50	170	1	0.1	2	13	0.03...0.11
HBZV55-C20	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
HBZV55-C22	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
HBZV55-C24	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
HBZV55-C27	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
HBZV55-C30	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
HBZV55-C33	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
HBZV55-C36	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
HBZV55-C39	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
HBZV55-C43	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
HBZV55-C47	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
HBZV55-C51	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
HBZV55-C56	56	52...60	2.5	135	700	0.5	0.1	10	43	0.04...0.12
HBZV55-C62	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
HBZV55-C68	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
HBZV55-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.

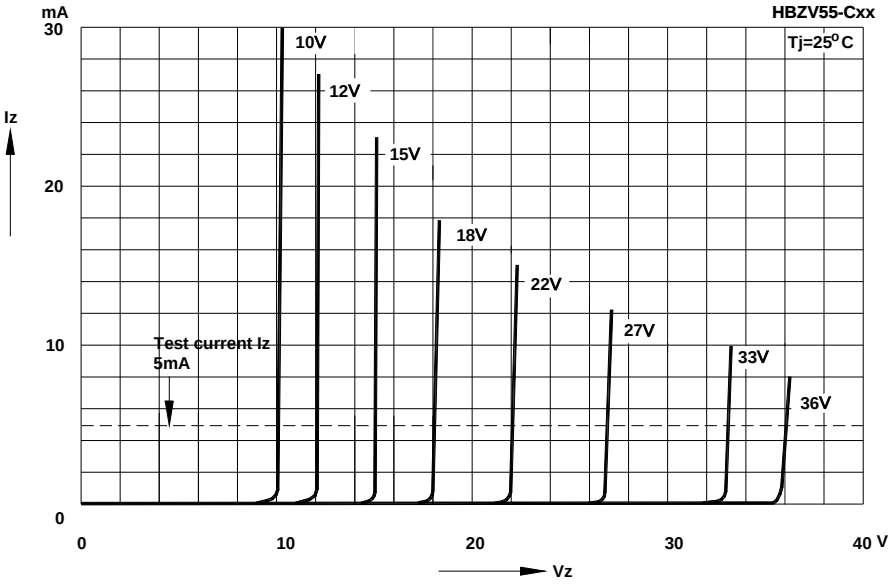
[2] The ZMM1 is a silicon diode with operation in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.

Typical Characteristics

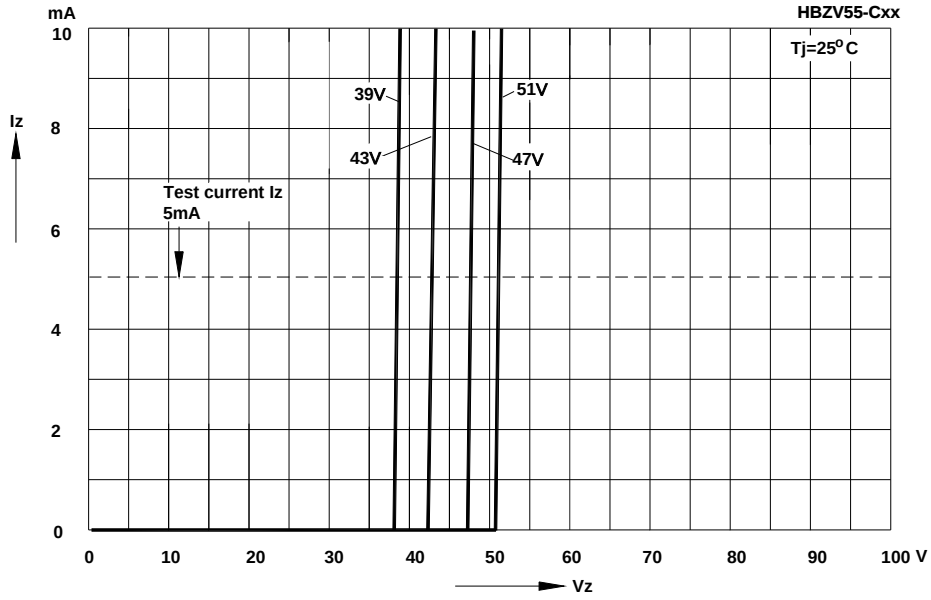


Breakdown characteristics

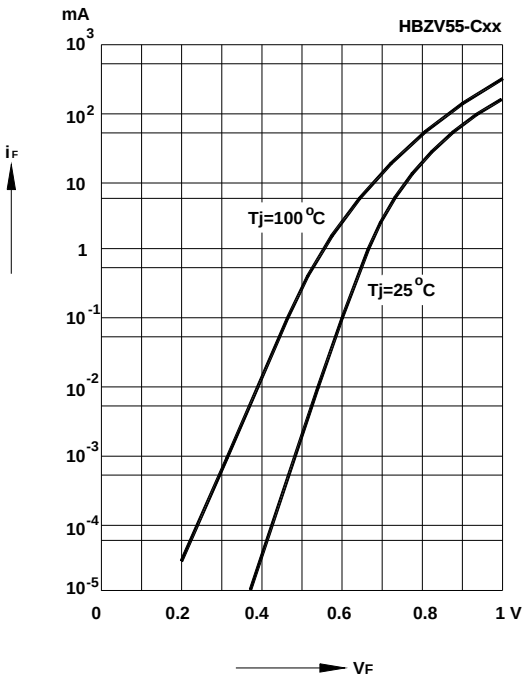
T_j = constant (pulsed)



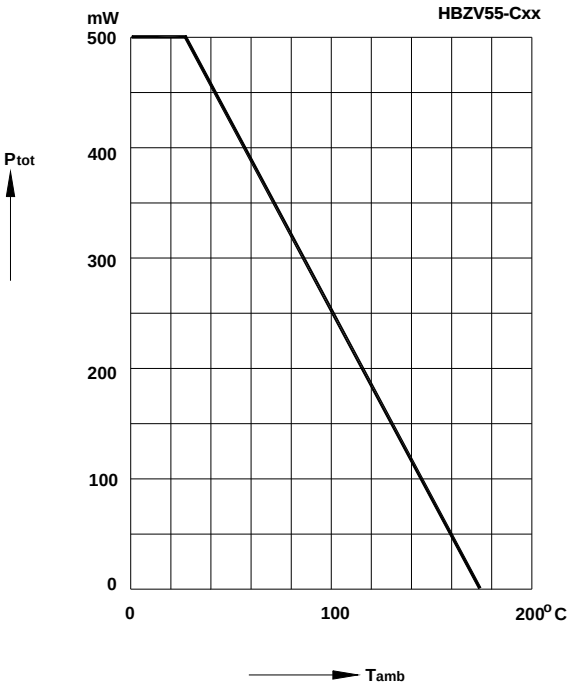
Breakdown characteristics
T_j = constant (pulsed)



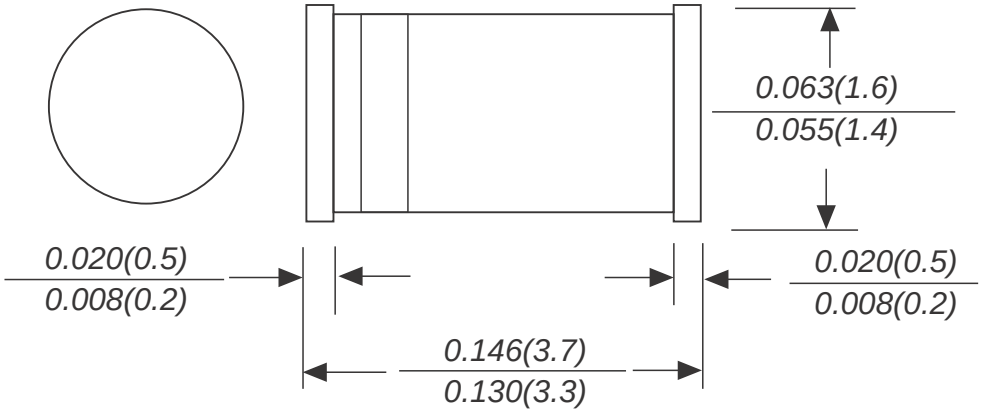
Forward characteristics



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



LL-34 Package Information



Dimensions in inches and (millimeters)

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