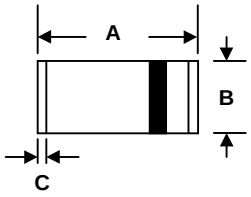
Features

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 BZXV55-B...

LL-34



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 (Ta = 25°C)

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

Characteristics at T_{amb} = 25°C

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	0.3[1)]	K/mW
[1)] Valid provided that electrodes are kept at ambient temperature					

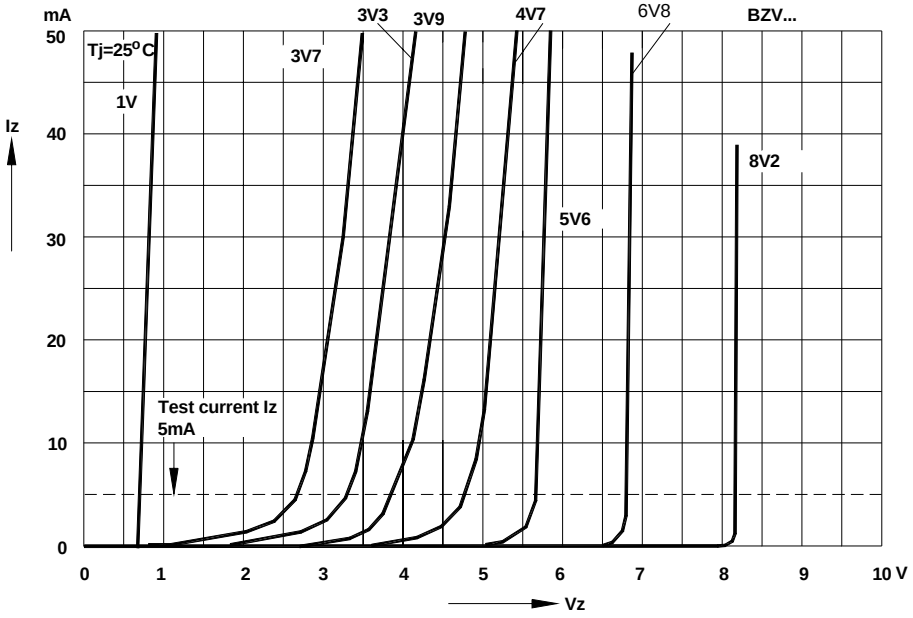
Type	Zener Voltage Range[1]			Dynamic Resistance			Reverse Leakage Current			Temp coefficient of Zener Voltage
	Vznom V	I_{ZT} for V_{ZT}[2] mA	V	r_{ZJT} Ω	r_{ZJK} at I_{ZK} Ω	mA	T_a=25°C µA	T_a = 125°C µA	I_R at V_R V	TKvz %/K
BZV55-B1V[3]	0.75	5	**0.73...0.77**	<8	<50	1	--	--	--	-0.26...-0.23
BZV55-B2V0	2.0	5	1.96...2.04	<85	<600	1	<100	<200	1	-0.09...-0.06
BZV55-B2V2	2.2	5	**2.15...2.25**	<85	<600	1	<75	<160	1	-0.09...-0.06
BZV55-B2V4	2.4	5	**2.35...2.45**	<85	<600	1	<50	<100	1	-0.09...-0.06
BZV55-B2V7	2.7	5	**2.64...2.75**	<85	<600	1	<10	<50	1	-0.09...-0.06
BZV55-B3V0	3.0	5	**2.94...3.06**	<85	<600	1	<4	<40	1	-0.08...-0.05
BZV55-B3V3	3.3	5	**3.23...3.36**	<85	<600	1	<2	<40	1	-0.08...-0.05
BZV55-B3V6	3.6	5	**3.52...3.67**	<85	<600	1	<2	<40	1	-0.08...-0.05
BZV55-B3V9	3.9	5	**3.82...3.98**	<85	<600	1	<2	<40	1	-0.08...-0.05
BZV55-B4V3	4.3	5	**4.21...4.39**	<75	<600	1	<1	<20	1	-0.06...-0.03
BZV55-B4V7	4.7	5	**4.60...4.80**	<60	<600	1	<0.5	<10	1	-0.05...+0.02
BZV55-B5V1	5.1	5	**4.99...5.20**	<35	<550	1	<0.1	<2	1	-0.02...+0.02
BZV55-B5V6	5.6	5	**5.49...5.71**	<25	<450	1	<0.1	<2	1	-0.05...+0.05
BZV55-B6V2	6.2	5	**6.07...6.32**	<10	<200	1	<0.1	<2	2	0.03...0.06
BZV55-B6V8	6.8	5	**6.66...6.94**	<8	<150	1	<0.1	<2	3	0.03...0.07
BZV55-B7V5	7.5	5	**7.35...7.65**	<7	<50	1	<0.1	<2	5	0.03...0.07
BZV55-B8V2	8.2	5	**8.04...8.36**	<7	<50	1	<0.1	<2	6.2	0.03...0.08
BZV55-B9V1	9.1	5	**8.92...9.28**	<10	<50	1	<0.1	<2	6.8	0.03...0.09
BZV55-B10V	10	5	**9.8...10.2**	<15	<70	1	<0.1	<2	7.5	0.03...0.1
BZV55-B11V	11	5	**10.8...11.2**	<20	<70	1	<0.1	<2	8.2	0.03...0.11
BZV55-B12V	12	5	**11.8...12.2**	<20	<90	1	<0.1	<2	9.1	0.03...0.11
BZV55-B13V	13	5	**12.7...13.3**	<26	<110	1	<0.1	<2	10	0.03...0.11
BZV55-B15V	15	5	**14.7...15.3**	<30	<110	1	<0.1	<2	11	0.03...0.11
BZV55-B16V	16	5	**15.7...16.3**	<40	<170	1	<0.1	<2	12	0.03...0.11
BZV55-B18V	18	5	**17.6...18.4**	<50	<170	1	<0.1	<2	13	0.03...0.11
BZV55-B20V	20	5	**19.6...20.4**	<55	<220	1	<0.1	<2	15	0.03...0.11
BZV55-B22V	22	5	**21.6...22.5**	<55	<220	1	<0.1	<2	16	0.04...0.12
BZV55-B24V	24	5	**23.5...24.5**	<80	<220	1	<0.1	<2	18	0.04...0.12
BZV55-B27V	27	5	**26.4...27.6**	<80	<220	1	<0.1	<2	20	0.04...0.12
BZV55-B30V	30	5	**29.4...30.6**	<80	<220	1	<0.1	<2	22	0.04...0.12
BZV55-B33V	33	5	**32.3...33.7**	<80	<220	1	<0.1	<2	24	0.04...0.12
BZV55-B36V	36	5	**35.2...36.8**	<80	<220	1	<0.1	<2	27	0.04...0.12
BZV55-B39V	39	2.5	**38.2...39.8**	<90	<500	0.5	<0.1	<5	30	0.04...0.12
BZV55-B43V	43	2.5	**42.1...43.9**	<90	<500	0.5	<0.1	<5	33	0.04...0.12
BZV55-B47V	47	2.5	**46.0...48.0**	<110	<600	0.5	<0.1	<5	36	0.04...0.12
BZV55-B51V	51	2.5	**49.9...52.1**	<125	<700	0.5	<0.1	<10	39	0.04...0.12
BZV55-B56V	56	2.5	**54.8...57.2**	<135	<700	0.5	<0.1	<10	43	0.04...0.12
BZV55-B62V	62	2.5	**60.7...63.3**	<150	<1000	0.5	<0.1	<10	47	0.04...0.12
BZV55-B68V	68	2.5	**66.6...69.4**	<200	<1000	0.5	<0.1	<10	51	0.04...0.12
BZV55-B75V	75	2.5	**73.5...76.5**	<250	<1000	0.5	<0.1	<10	56	0.04...0.12
BZV55-B82V	82	2.5	**80.3...83.7**	<300	<1500	0.25	<0.1	<10	62	0.05...0.12
BZV55-B91V	91	1	**89.1...92.9**	<450	<2000	0.1	<0.1	<10	68	0.05...0.12
BZV55-B100V	100	1	**98.0...102.0**	<450	<5000	0.1	<0.1	<10	75	0.05...0.12
BZV55-B110V	110	1	**107.8...112.2**	<600	<5000	0.1	<0.1	<10	82	0.05...0.12
BZV55-B120V	120	1	**117.6...122.4**	<800	<5500	0.1	<0.1	<10	91	0.05...0.12
BZV55-B130V	130	1	**127.4...132.6**	<950	<6000	0.1	<0.1	<10	100	0.05...0.12
BZV55-B150V	150	1	**147.0...153.0**	<1250	<6500	0.1	<0.1	<10	110	0.05...0.12
BZV55-B160V	160	1	**156.8...163.2**	<1400	<7000	0.1	<0.1	<10	120	0.05...0.12
BZV55-B180V	180	1	**176.4...183.6**	<1700	<8500	0.1	<0.1	<10	130	0.05...0.12
BZV55-B200V	200	1	**196.0...204.0**	<2000	<10000	0.1	<0.1	<10	150	0.05...0.12

1) Tested with pulses t_p = 20 ms.

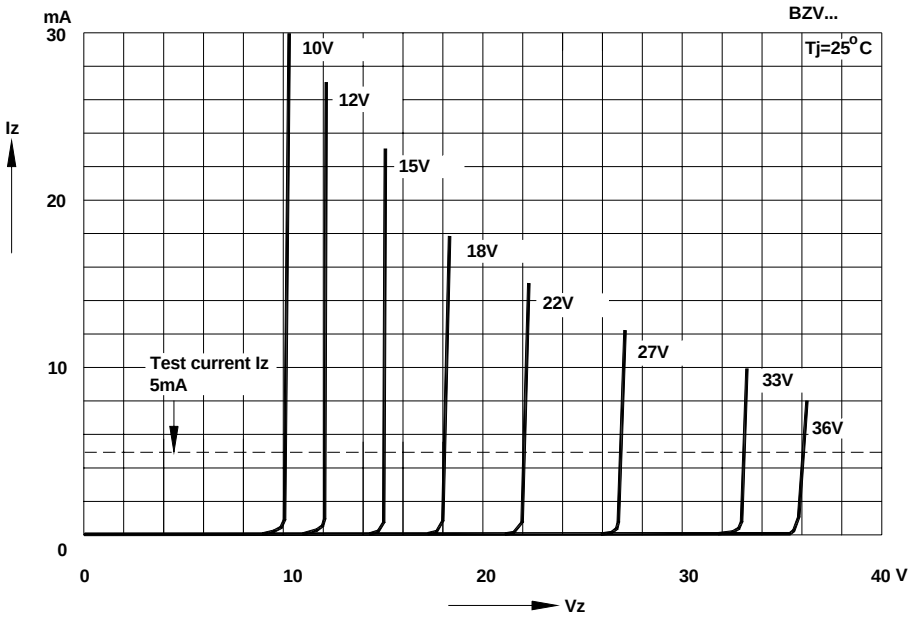
1) Valid provided that electrodes are kept at ambient temperature

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.

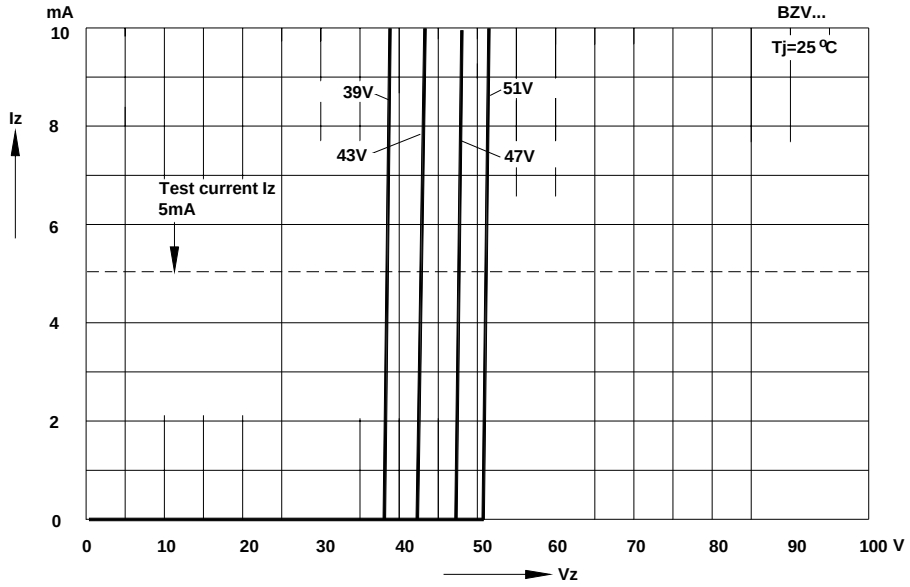
Breakdown characteristics
T_j = constant (pulsed)



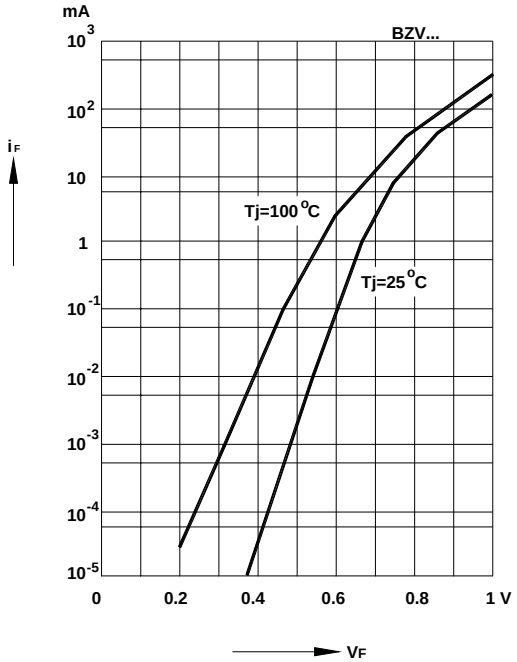
Breakdown characteristics
T_j = constant (pulsed)



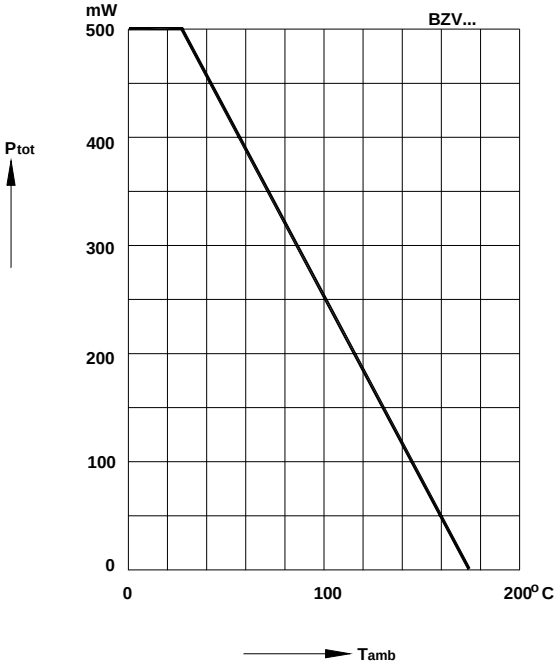
Breakdown characteristics
T_j = constant (pulsed)



Forward characteristics

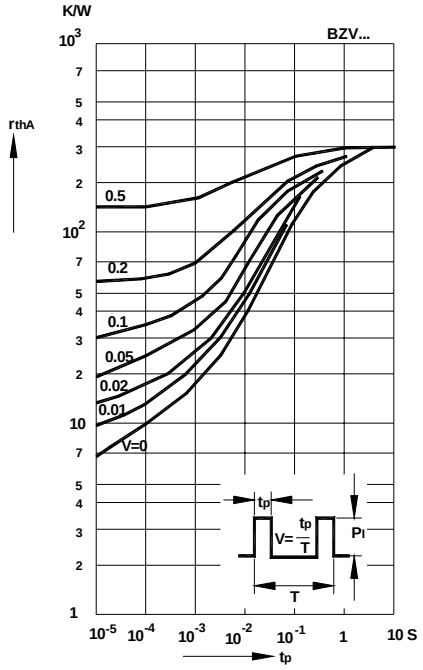


Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature.

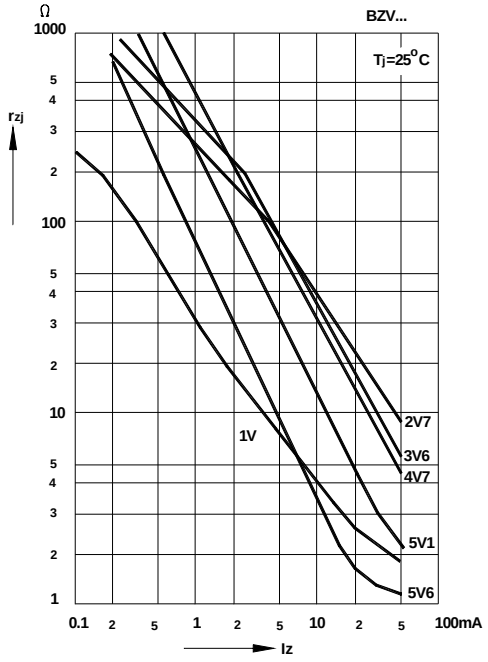


Pulse thermal resistance versus pulse duration

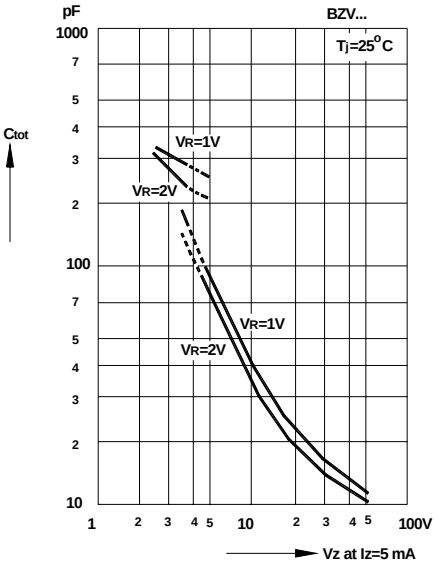
Valid provided that the electrodes are kept at ambient temperature.



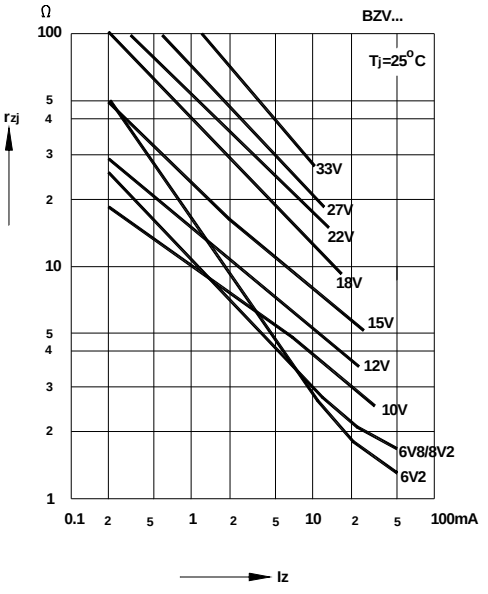
Dynamic resistance versus Zener current



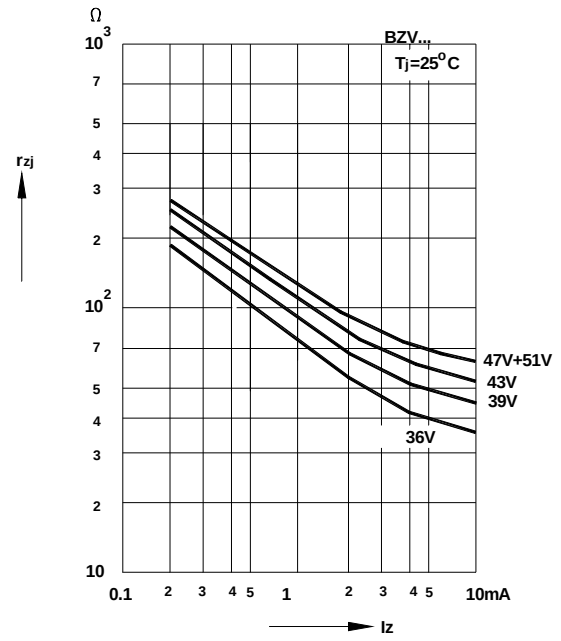
Capacitance versus Zener voltage



Dynamic resistance versus Zener current

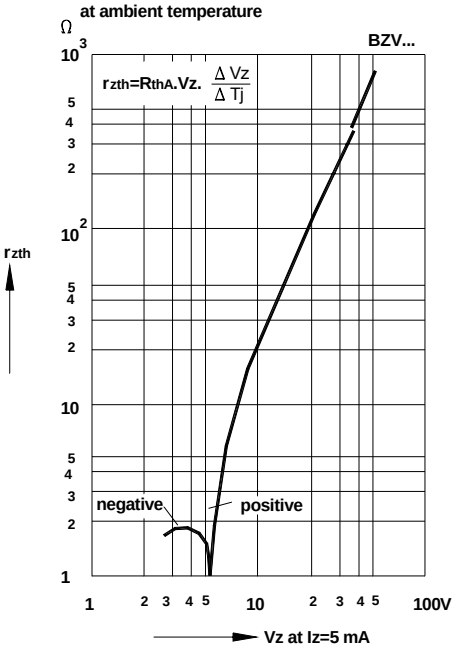


Dynamic resistance versus Zener current

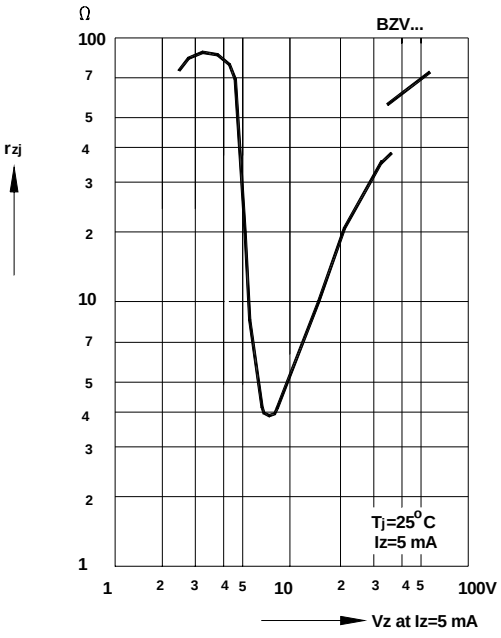


Thermal differential resistance versus Zener voltage

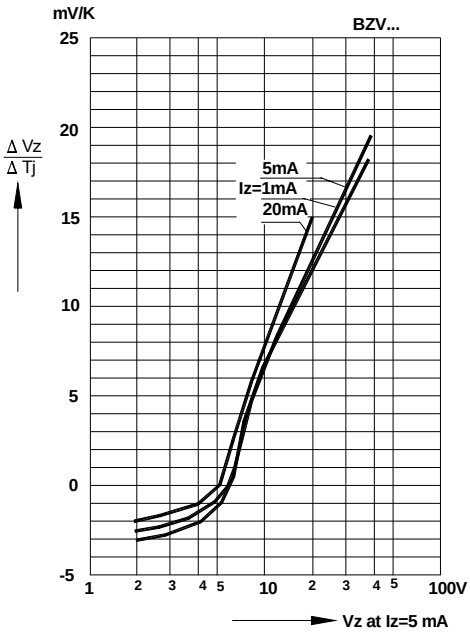
Valid provided that electrodes are kept at ambient temperature



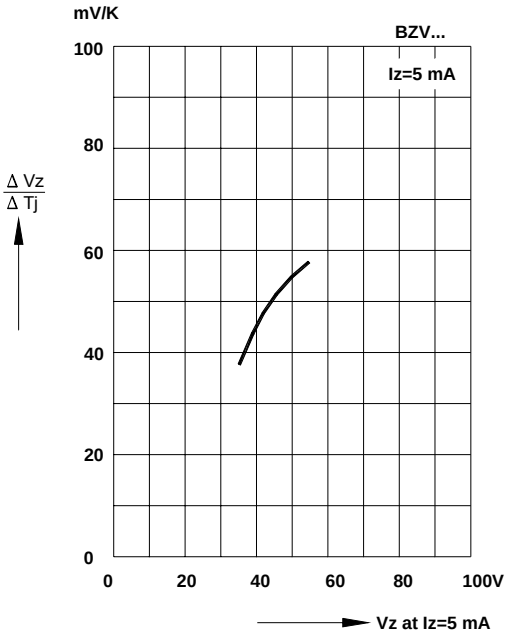
Dynamic resistance versus Zener voltage



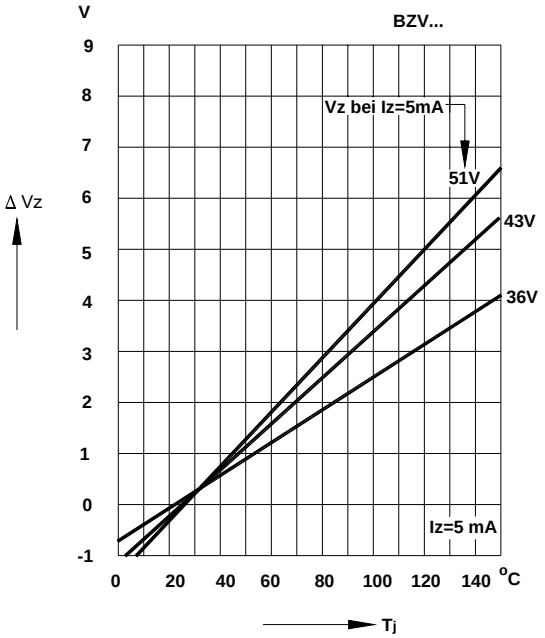
Temperature dependence of Zener voltage versus Zener voltage



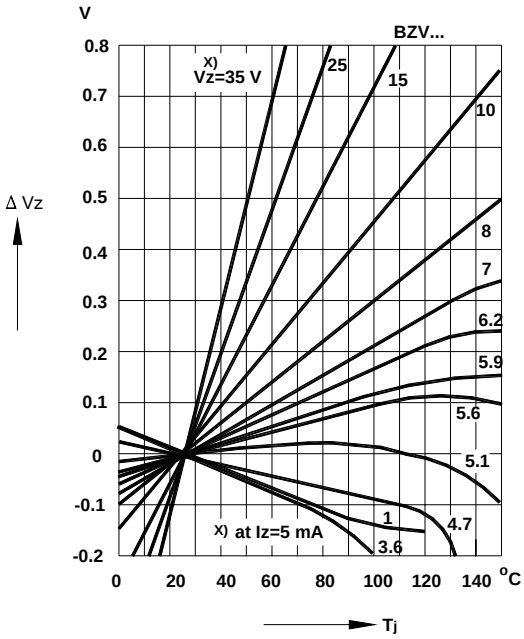
Temperature dependence of Zener voltage versus Zener voltage



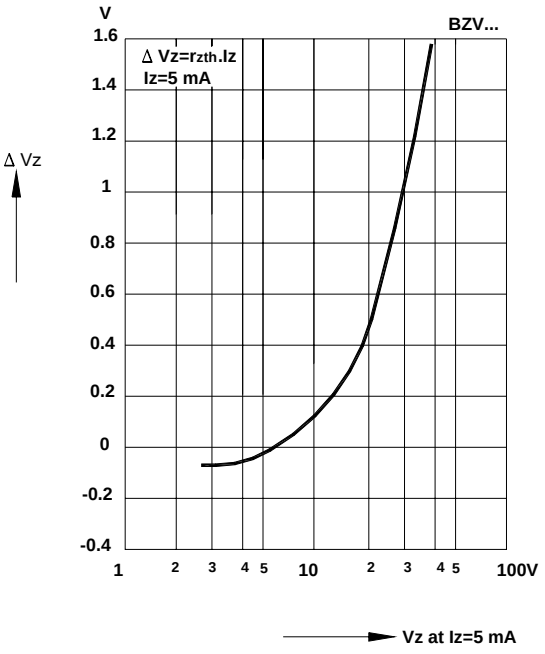
Change of Zener voltage versus junction temperature



Change of Zener voltage versus junction temperature



Change of Zener voltge from turn-on up to the point of thermal equilibrium versus Zener voltage



Change of Zener voltge from turn-on up to the point of thermal equilibrium versus Zener voltage