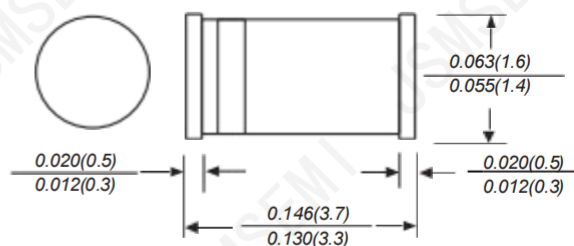


FEATURE

In MiniMELF case especially for automatic insertion.



SOD-80

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

¹⁾ Valid provided that electrodes are kept at ambient temperature

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

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	0.3 ¹⁾	K/mW
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1	V

¹⁾ Valid provided that electrodes are kept at ambient temperature

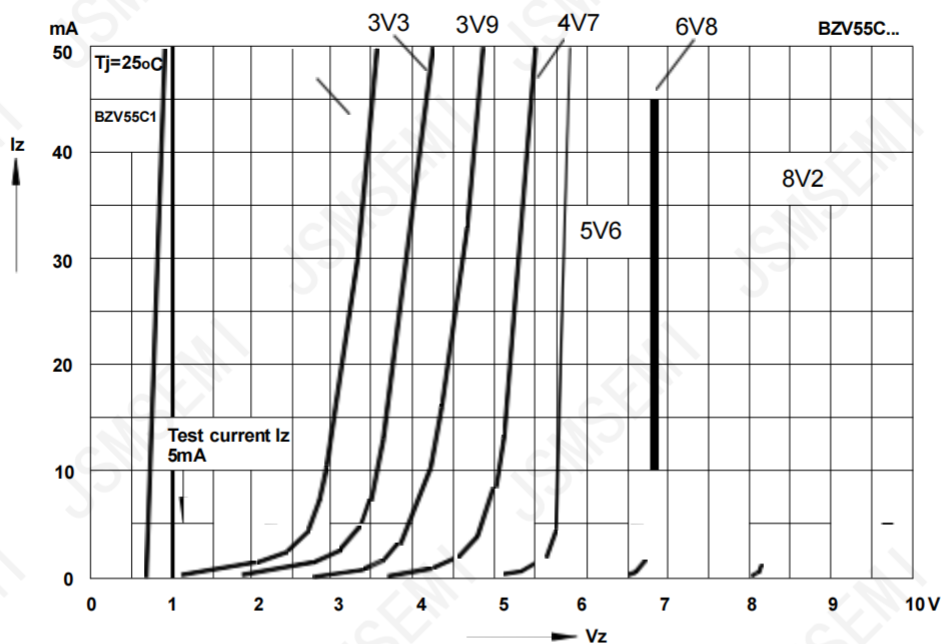
Electrical Characteristics@AT=25°C unless otherwise specified

Type	Zener Voltage Range(1)			Dynamic Resistance			Reverse Leakage Curent			Temp.Coefficientof Zener Voltage
	VZnom	VZ	at IZT	ZZT	ZZK	at IZK	Ta=25℃	Ta=125℃	at VR	
	(V)	(V)	(mA)	Max. (2)	Max(2)	(mA)	Max(μA)	Max. (μA)	(V)	
BZV55-C2V0,115	2	1.8...215	5	85	600	1	100	200	1	-0.09...-0.06
BZV55-C2V2,115	2.2	2.08...2.33	5	85	600	1	75	160	1	-0.09...-0.06
BZV55-C2V4,115	2.4	2.28...2.56	5	85	600	1	50	100	1	-0.09...-0.06
BZV55-C2V7,115	2.7	2.5...2.9	5	85	600	1	10	50	1	-0.09...-0.06
BZV55-C3V0,115	3	2.8...3.2	5	85	600	1	4	40	1	-0.08...-0.05
BZV55-C3V3,115	3.3	3.1...35	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C3V6,115	3.6	3.4...3.8	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C3V9,115	3.9	3.7...4.1	5	85	600	1	2	40	1	-0.08...-0.05
BZV55-C4V3,115	4.3	4...4.6	5	75	600	1	1	20	1	-0.06.0.03
BZV55-C4V7,115	4.7	4.4...5	5	60	600	1	0.5	10	1	-0.05...+0.02
BZV55-C5V1,115	5.1	4.8...5.4	5	35	550	1	0.1	2	1	-0.02+0.02
BZV55-C5V6,115	5.6	5.2...6	5	25	450	1	0.1	2	1	-0.05...+0.05
BZV55-C6V2,115	6.2	5.8...6.6	5	10	200	1	0.1	2	2	0.03...0.06
BZV55-C6V8,115	6.8	6.4...7.2	5	8	150	1	0.1	2	3	0.03...0.07
BZV55-C7V5,115	7.5	7.7...9	5	7	50	1	0.1	2	5	0.03...0.07
BZV55-C8V2,115	8.2	7.7...8.7	5	7	50	1	0.1	2	6.2	0.03...0.08
BZV55-C9V1,115	9.1	8.5...9.6	5	10	50	1	0.1	2	6.8	0.03...0.09
BZV55-C10,115	10	9.4...10.6	5	15	70	1	0.1	2	7.5	0.03.0.1
BZV55-C11,115	11	10.4...11.6	5	20	70	1	0.1	2	8.2	0.03...0.11
BZV55-C12,115	12	11.4...12.7	5	20	90	1	0.1	2	9.1	0.03...0.11
BZV55-C13,115	13	12.4...14.1	5	26	110	1	0.1	2	10	0.03...0.11
BZV55-C15,115	15	13.8...15.6	5	30	110	1	0.1	2	11	0.03...0.11
BZV55-C16,115	16	15.3...17.1	5	40	170	1	0.1	2	12	0.03...0.11
BZV55-C18,115	18	16.8.19.1	5	50	170	1	0.1	2	13	0.03...0.11
BZV55-C20,115	20	18.8...21.2	5	55	220	1	0.1	2	15	0.03...0.11
BZV55-C22,115	22	20.8...23.3	5	55	220	1	0.1	2	16	0.04...0.12
BZV55-C24,115	24	22.8...25.6	5	80	220	1	0.1	2	18	0.04...0.12
BZV55-C27,115	27	25.1...28.9	5	80	220	1	0.1	2	20	0.04...0.12
BZV55-C30,115	30	28...32	5	80	220	1	0.1	2	22	0.04...0.12
BZV55-C33,115	33	31...35	5	80	220	1	0.1	2	24	0.04...0.12
BZV55-C36,115	36	34...38	5	80	220	1	0.1	2	27	0.04...0.12
BZV55-C39,115	39	37...41	2.5	90	500	0.5	0.1	5	30	0.04...0.12
BZV55-C43,115	43	40...46	2.5	90	500	0.5	0.1	5	33	0.04...0.12
BZV55-C47,115	47	44...50	2.5	110	600	0.5	0.1	5	36	0.04...0.12
BZV55-C51,115	51	48...54	2.5	125	700	0.5	0.1	10	39	0.04...0.12
BZV55-C56,115	56	52...6	2.5	135	700	0.5	0.1	10	43	0.04...0.12
BZV55-C62,115	62	58...66	2.5	150	1000	0.5	0.1	10	47	0.04...0.12
BZV55-C68,115	68	64...72	2.5	200	1000	0.5	0.1	10	51	0.04...0.12
BZV55-C75,115	75	70...79	2.5	250	1000	0.5	0.1	10	56	0.04...0.12

Notes: 1. Tested with pulses $t_p = 20$ ms.
 2. Valid provided that electrodes are kept at ambient temperature.

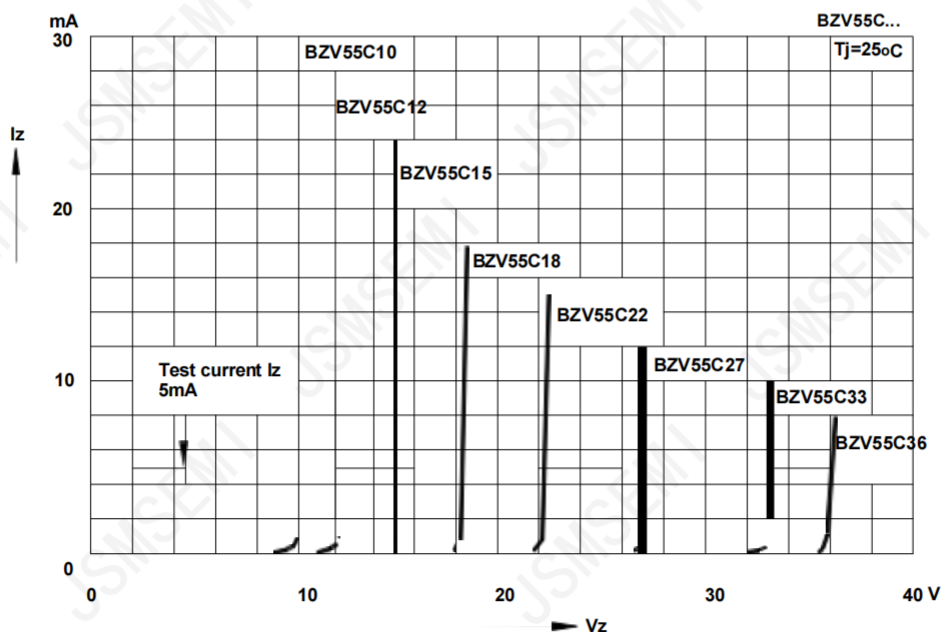
Breakdown characteristics

$T_J = \text{constant}$ (pulsed)

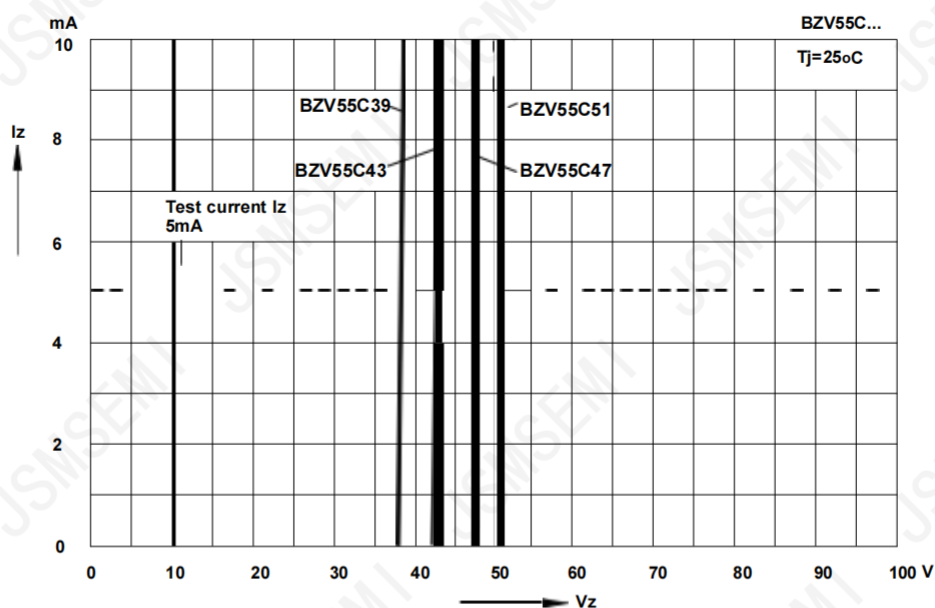


Breakdown characteristics

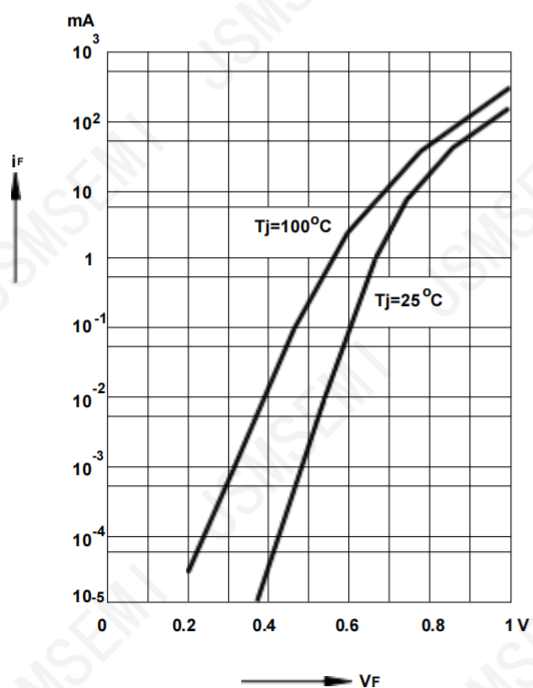
$T_J = \text{constant}$ (pulsed)



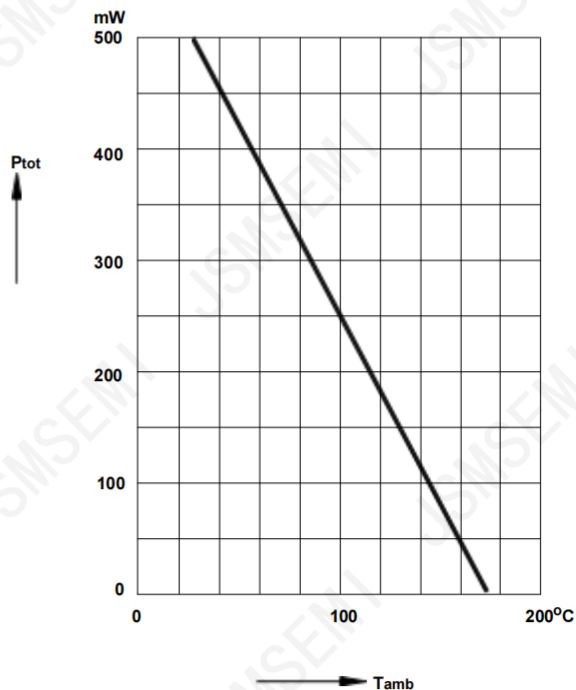
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



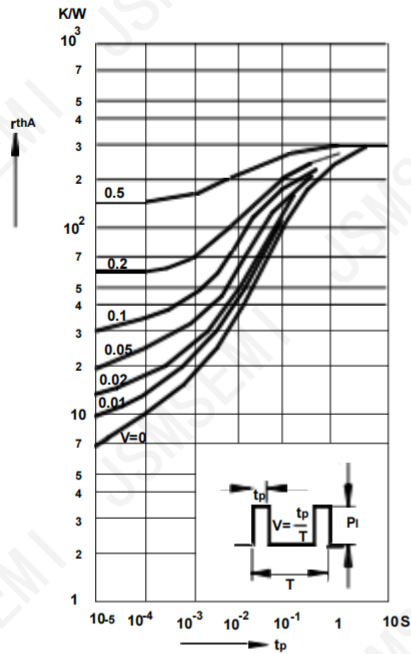
Forward characteristics



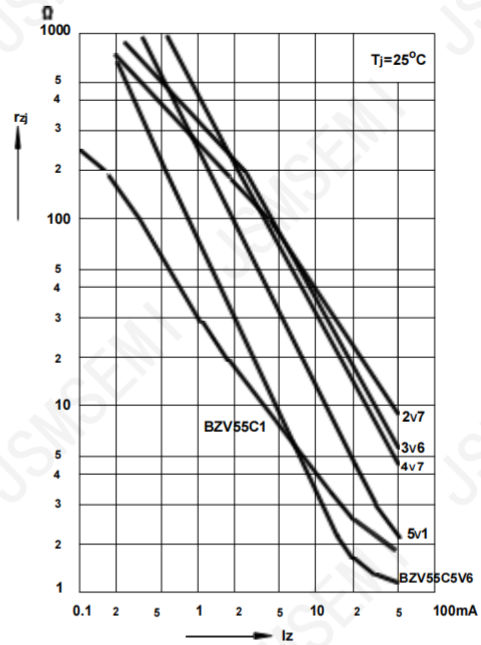
Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature.



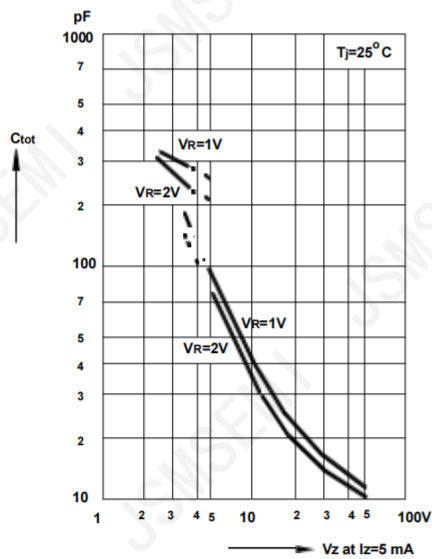
**Pulse thermal resistance
versus pulse duration**
Valid provided that the electrodes are kept
at ambient temperature.



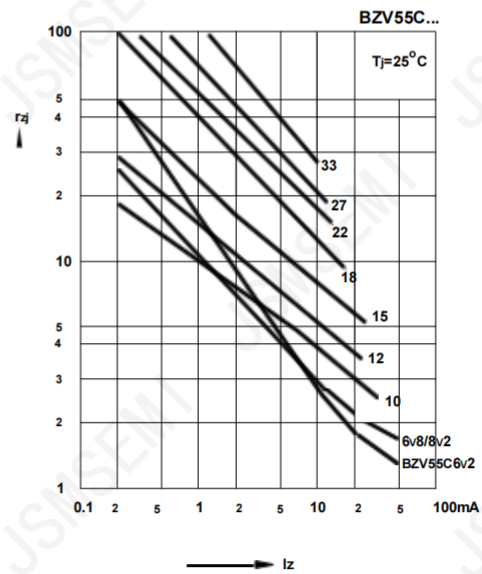
**Dynamic resistance
versus Zener current**

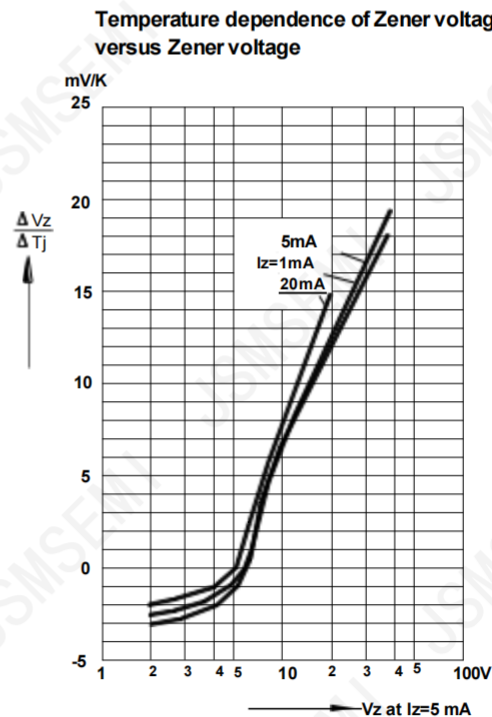
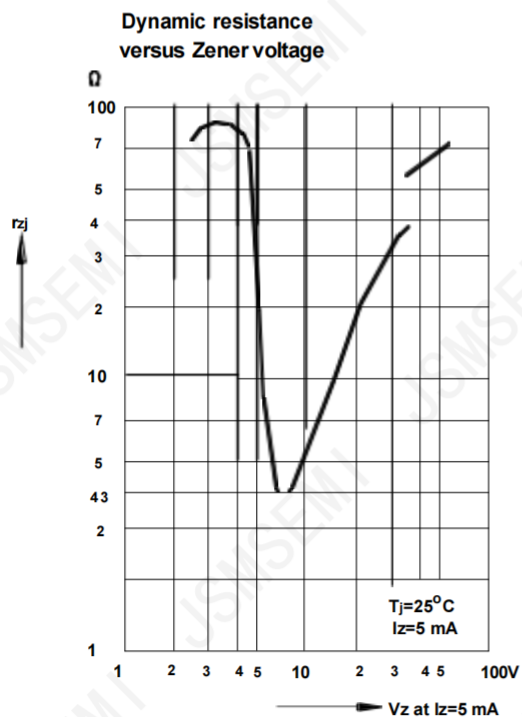
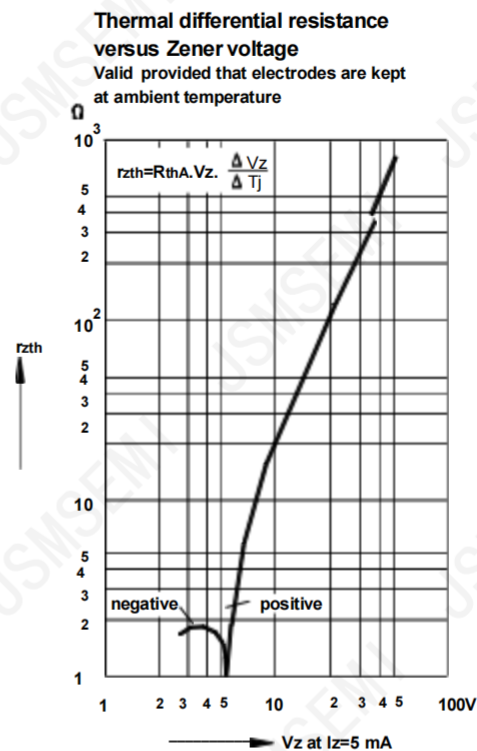
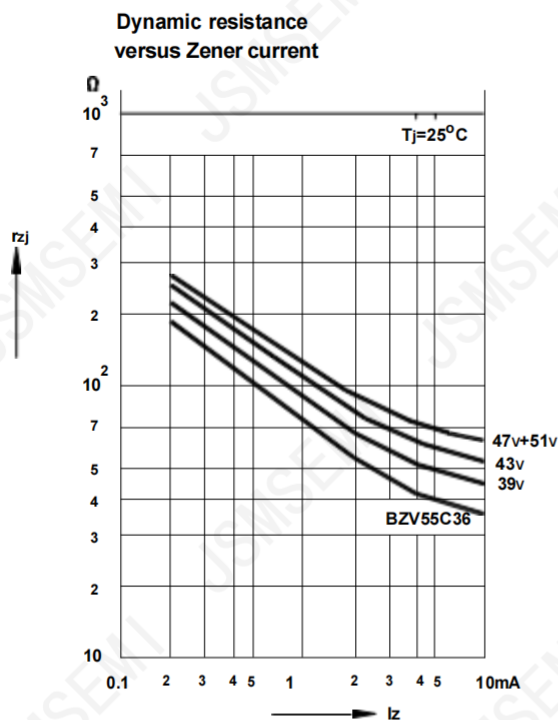


**Capacitance versus
Zener voltage**

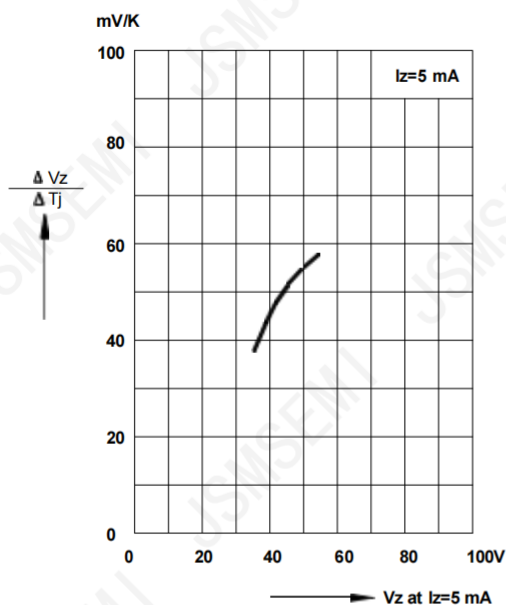


**Dynamic resistance
versus Zener current**

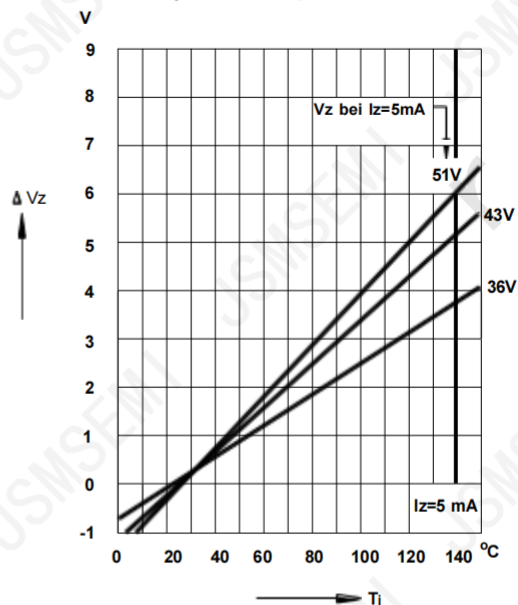




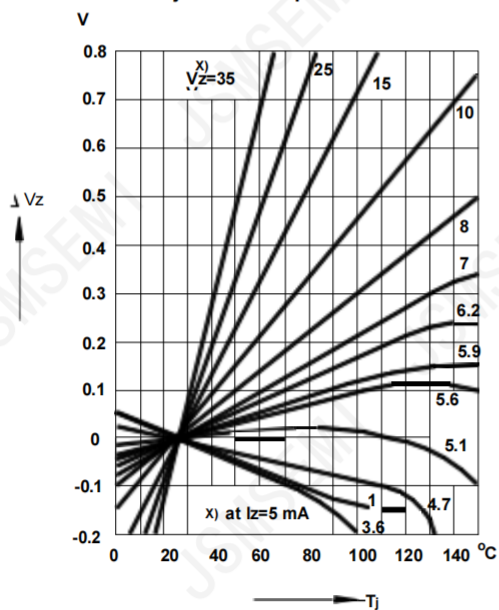
Temperature dependence of Zener voltage
versus Zener voltage



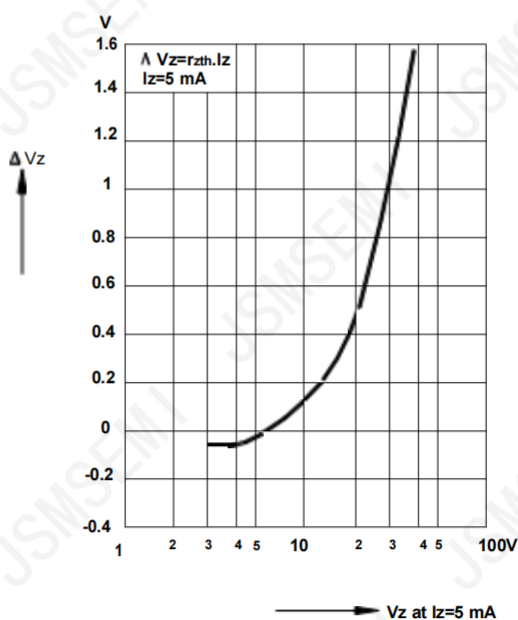
Change of Zener voltage
versus junction temperature



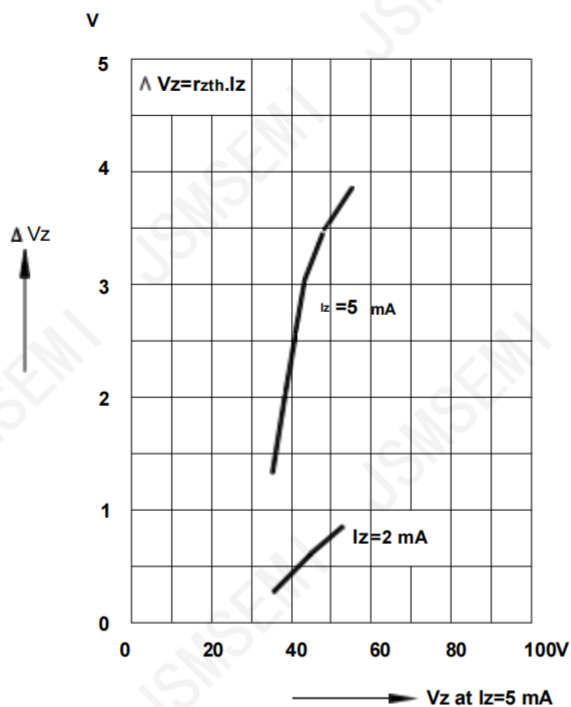
Change of Zener voltage
versus junction temperature



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



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



Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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