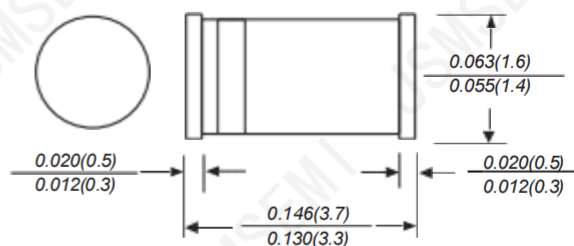


FEATURE

In MiniMELF case especially for automatic insertion.



LL-34

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

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

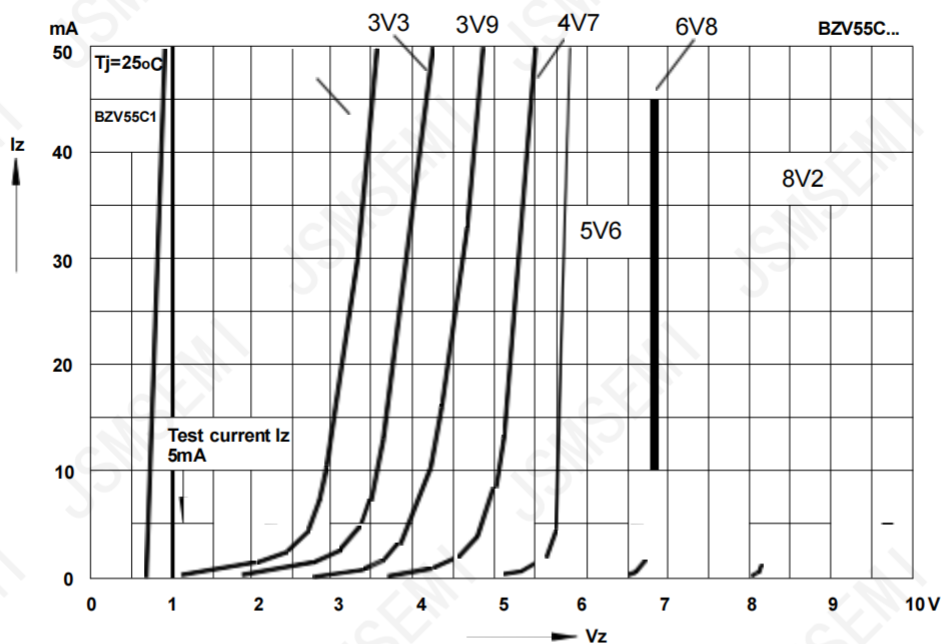
Electrical Characteristics@AT=25°C unless otherwise specified

Type	Zener Voltage Range(1)			Dynamic Resistance		Reverse Leakage Current				Temp.Coefficiertof 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.

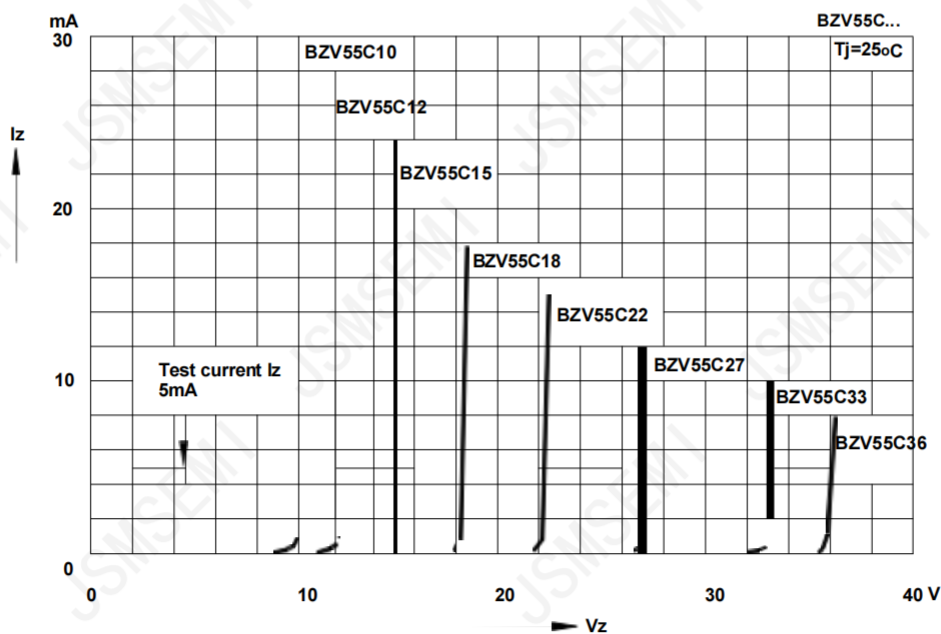
Breakdown characteristics

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

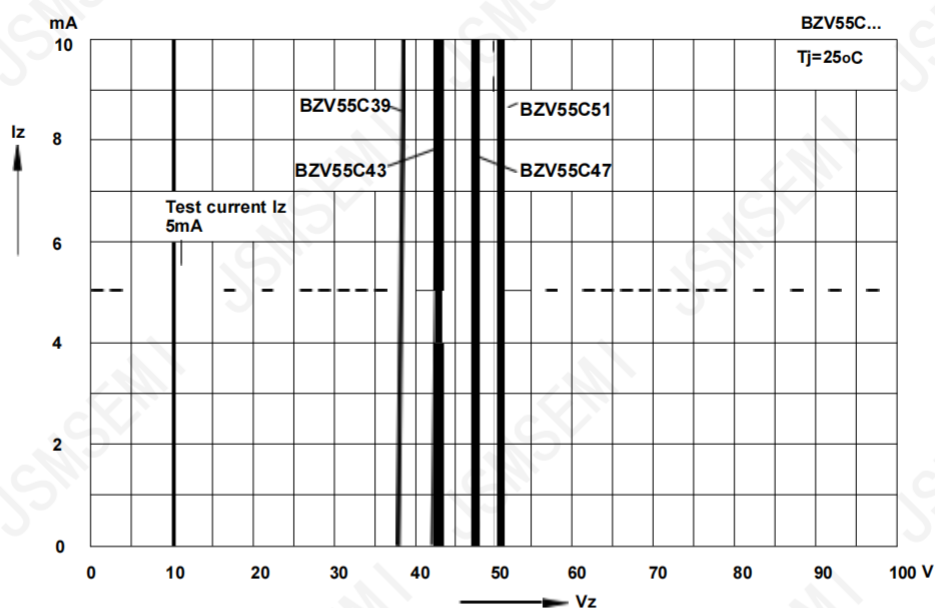


Breakdown characteristics

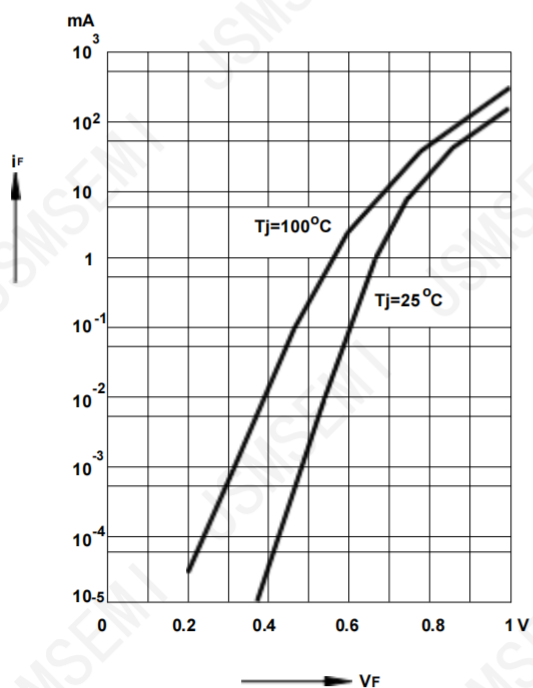
$T_j = \text{constant}$ (pulsed)



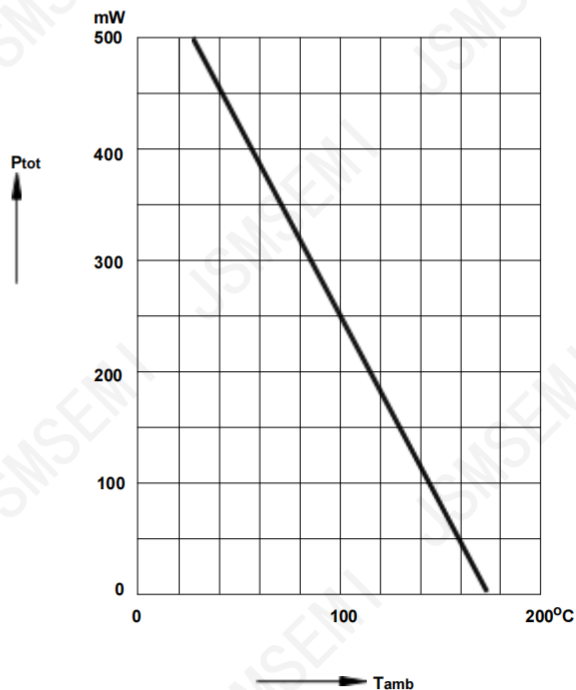
Breakdown characteristics
 $T_j = \text{constant (pulsed)}$



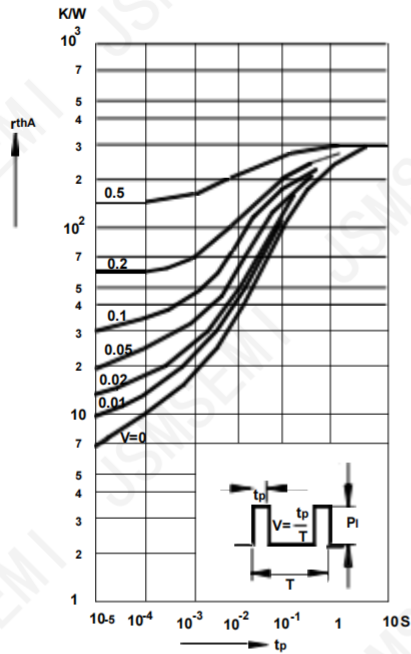
Forward characteristics



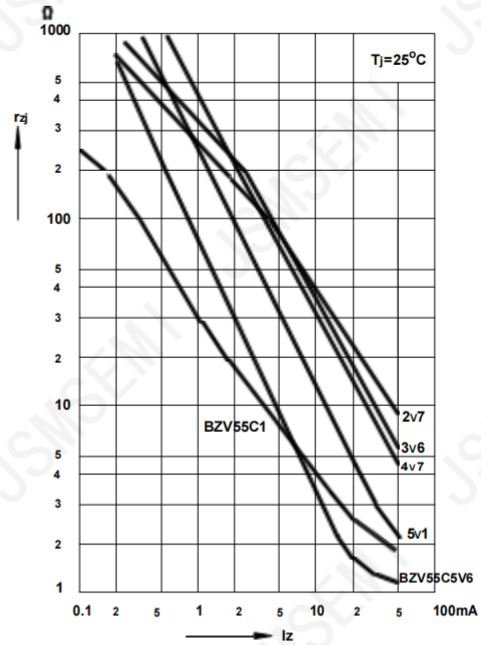
Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature.



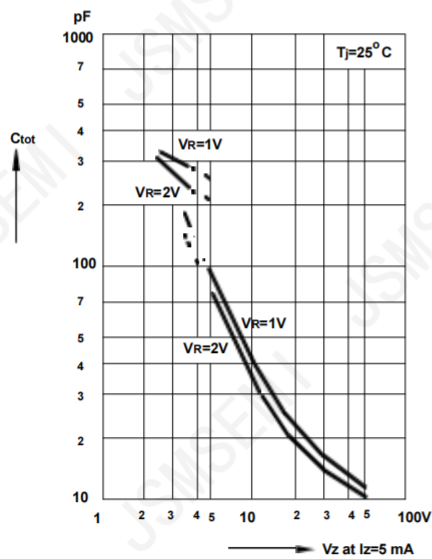
Pulse thermal resistance
versus pulse duration
Valid provided that the electrodes are kept
at ambient temperature.



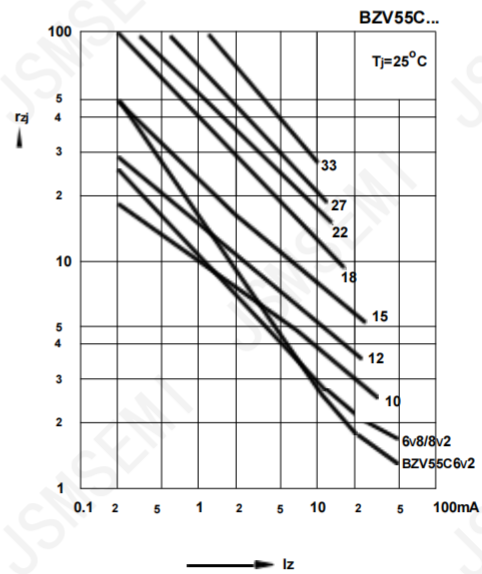
Dynamic resistance
versus Zener current

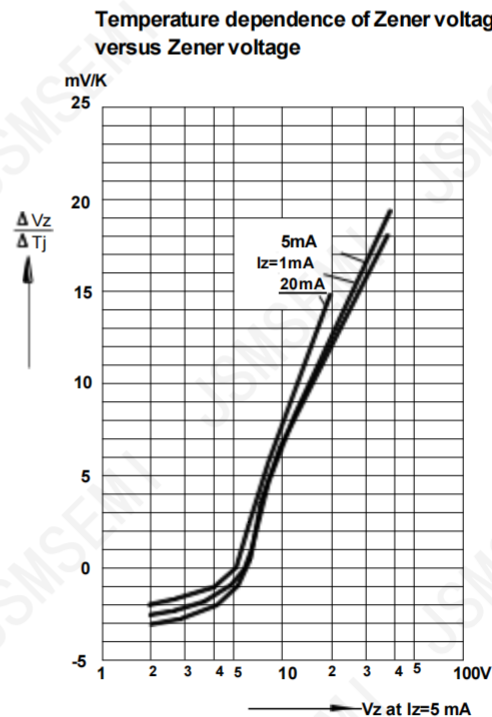
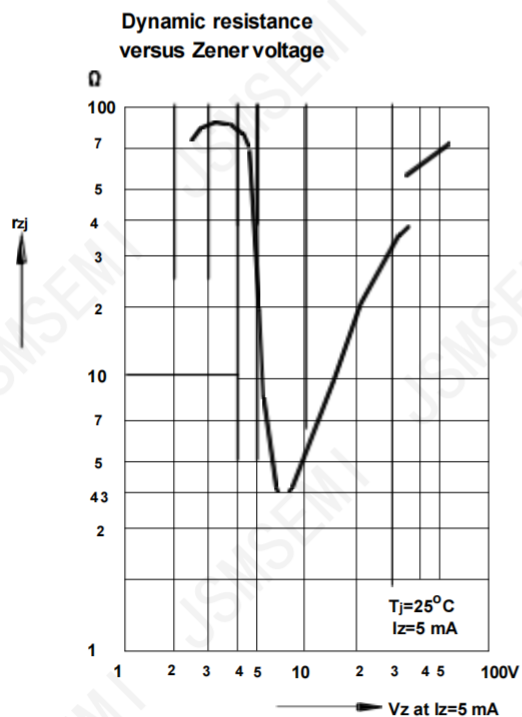
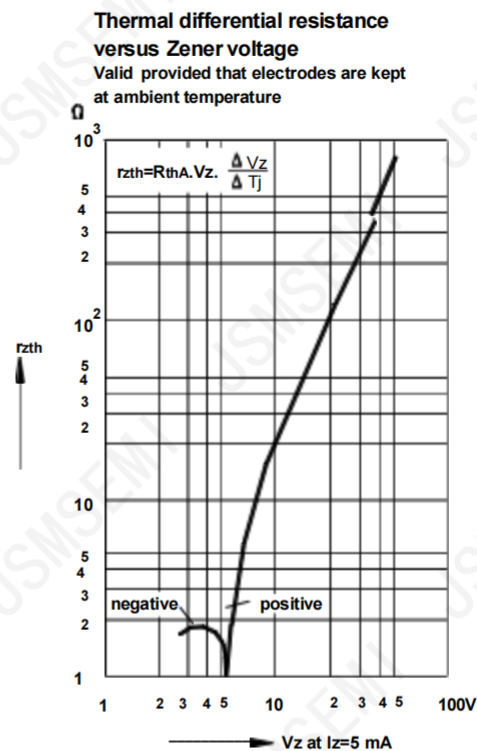
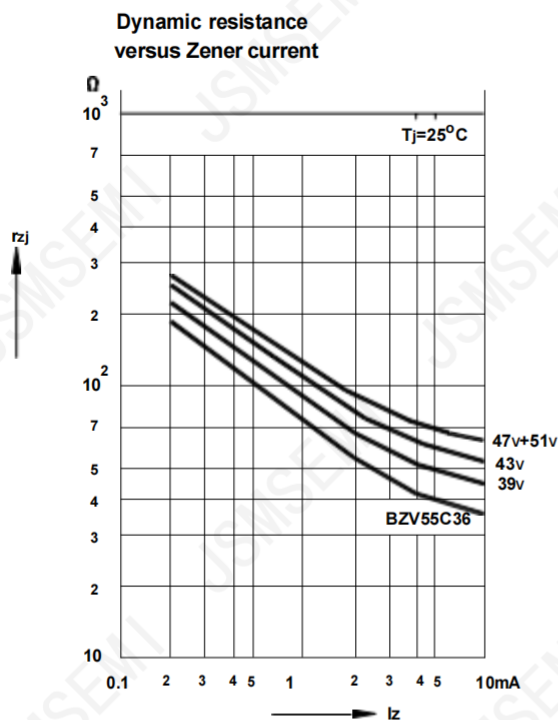


Capacitance versus
Zener voltage

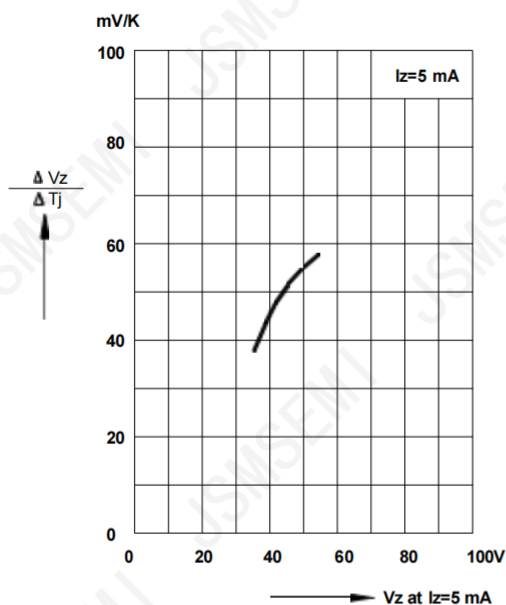


Dynamic resistance
versus Zener current

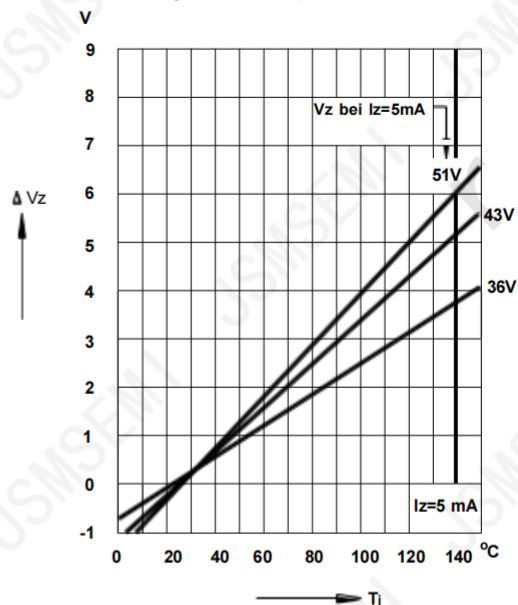




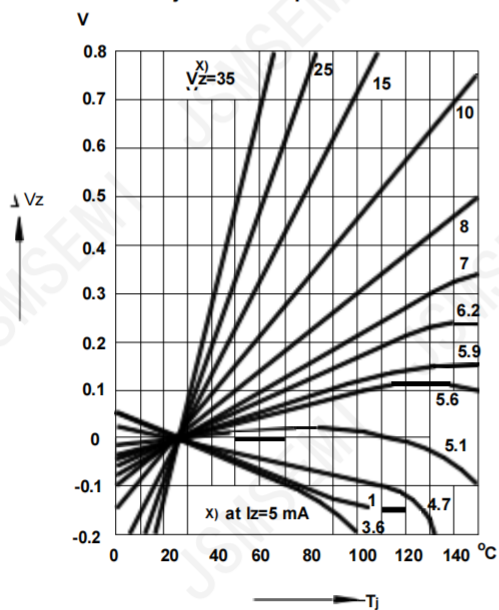
Temperature dependence of Zener voltage
versus Zener voltage



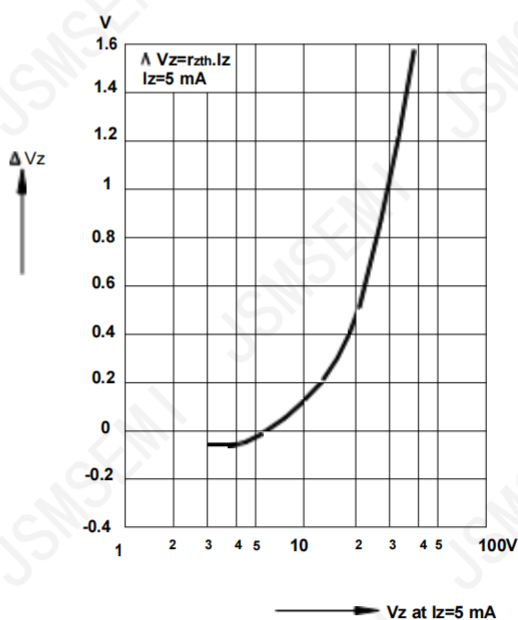
Change of Zener voltage
versus junction temperature



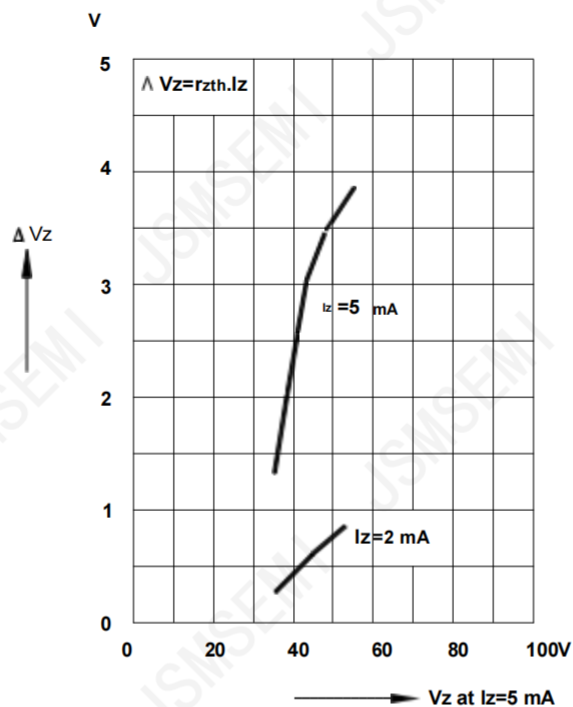
Change of Zener voltage
versus junction temperature



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

Important Notice

JSMSEMI Semiconductor (JSMSEMI) PRODUCTS ARE NEITHER DESIGNED NOR INTENDED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS UNLESS THE SPECIFIC JSMSEMI PRODUCTS ARE SPECIFICALLY DESIGNATED BY JSMSEMI FOR SUCH USE. BUYERS ACKNOWLEDGE AND AGREE THAT ANY SUCH USE OF JSMSEMI PRODUCTS WHICH JSMSEMI HAS NOT DESIGNATED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS IS SOLELY AT THE BUYER' S RISK.

JSMSEMI assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using JSMSEMI products.

Resale of JSMSEMI products or services with statements diferent from or beyond the parameters stated by JSMSEMI for that product or service voids all express and any implied warranties for the associated JSMSEMI product or s ervice. JSMSEMI is not responsible or liable for any such statements.

JSMSEMI All Rights Reserved. Information and data in this document are owned by JSMSEMI wholly and may not be edited, reproduced, or redistributed in any way without the express written consent from JSMSEMI.

Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the JSMSEMI product that you intend to use.

For additional information please contact Kevin@jsmsemi.com or visit www.jsmsemi.com