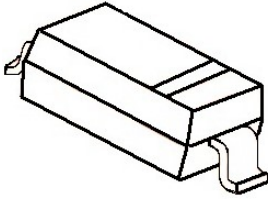




SOD-323

SOD-323 Plastic-Encapsulate Zener Diode



特征 Features

- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 200mW; Power Dissipation of 200mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOD-323 封装 SOD-323 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25°C 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
功率消耗 Power Dissipation	Pd	200 ¹⁾	mW
正向压降 Forward Voltage @IF=10mA	Vf	0.9 ²⁾	V
存储温度 Storage temperature range	Ts	-65-+150	°C

1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm²

2) Short duration test pulse used to minimize self-heating effect

3) f=1KHz

电特性 (TA = 25°C 除非另有规定)

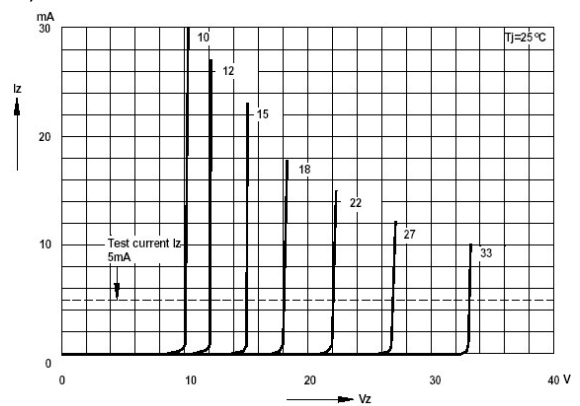
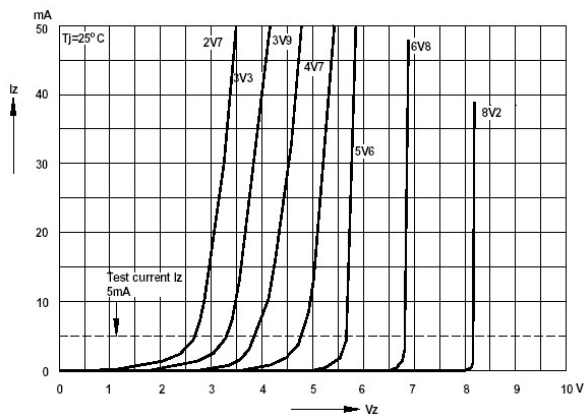
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		C @VR=0 f=1MHz
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω	mA	uA	V	pF			
MM3Z 2V0	WY	2.0	1.91	2.09	5	100	600	1.0	150	1.0	-3.5	0	450
MM3Z 2V4	WX	2.4	2.2	2.6	5	100	1000	0.5	50	1.0	-3.5	0	450
MM3Z 2V7	W1	2.7	2.5	2.9	5	100	1000	0.5	20	1.0	-3.5	0	450
MM3Z 3V0	W2	3.0	2.8	3.2	5	100	1000	0.5	10	1.0	-3.5	0	450
MM3Z 3V3	W3	3.3	3.1	3.5	5	95	1000	0.5	5	1.0	-3.5	0	450
MM3Z 3V6	W4	3.6	3.4	3.8	5	90	1000	0.5	5	1.0	-3.5	0	450
MM3Z 3V9	W5	3.9	3.7	4.1	5	90	1000	0.5	3	1.0	-3.5	-2.5	450
MM3Z 4V3	W6	4.3	4.0	4.6	5	90	1000	0.5	3	1.0	-3.5	0	450
MM3Z 4V7	W7	4.7	4.4	5.0	5	80	800	0.5	3	2.0	-3.5	0.2	260
MM3Z 5V1	W8	5.1	4.8	5.4	5	60	800	0.5	2	2.0	-2.7	1.2	225
MM3Z 5V6	W9	5.6	5.2	6.0	5	40	700	0.5	1	2.0	-2.0	2.5	200
MM3Z 6V2	WA	6.2	5.8	6.6	5	10	100	0.5	3	4.0	0.4	3.7	185
MM3Z 6V8	WB	6.8	6.4	7.2	5	15	160	0.5	2	4.0	1.2	4.5	155
MM3Z 7V5	WC	7.5	7.0	7.9	5	15	160	0.5	1	5.0	2.5	5.3	140
MM3Z 8V2	WD	8.2	7.7	8.7	5	15	160	0.5	0.7	5.0	3.2	6.2	135
MM3Z 9V1	WE	9.1	8.5	9.6	5	15	160	0.5	0.2	7.0	3.8	7.0	130
MM3Z 10	WF	10	9.4	10.6	5	20	160	0.5	0.1	8.0	4.5	8.0	130
MM3Z 11	WG	11	10.4	11.6	5	20	160	0.5	0.1	8.0	5.4	9.0	130
MM3Z 12	WH	12	11.4	12.7	5	25	80	0.5	0.1	8.0	6.0	10.0	130
MM3Z 13	WI	13	12.4	14.1	5	30	80	0.5	0.1	8.0	7.0	11.0	120

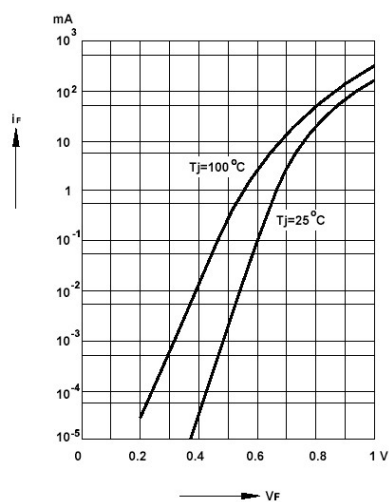
MM3Zxx Series

Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
		Nom(V)	Min(V)	Max(V)		Ω			uA	V	Min	Max	
MM3Z 15	WJ	15	13.8	15.6	5	30	400	0.5	0.05	10.5	9.2	13.0	110
MM3Z 16	WK	16	15.3	17.1	5	40	400	0.5	0.05	11.2	10.4	14.0	105
MM3Z 18	WL	18	16.8	19.1	5	45	400	0.5	0.05	12.6	12.4	16.0	100
MM3Z 20	WM	20	18.8	21.2	5	55	500	0.5	0.05	14.0	14.4	18.0	85
MM3Z 22	WN	22	20.8	23.3	5	55	500	0.5	0.05	15.4	16.4	20.0	85
MM3Z 24	WO	24	22.8	25.6	5	70	120	0.5	0.05	16.8	18.4	22.0	80
MM3Z 27	WP	27	25.1	28.9	2	80	300	0.5	0.05	18.9	21.4	25.3	70
MM3Z 30	WQ	30	28.0	32.0	2	80	300	0.5	0.05	21.0	24.4	29.4	70
MM3Z 33	WR	33	31.0	35.0	2	80	300	0.5	0.05	23.1	27.4	33.4	70
MM3Z 36	WS	36	34.0	38.0	2	90	500	0.5	0.05	25.2	30.4	37.4	70
MM3Z 39	WT	39	37.0	41.0	2	130	500	0.5	0.05	27.3	33.4	41.2	45
MM3Z 43	WU	43	40.0	46.0	2	150	500	0.5	0.05	30.1	37.6	46.6	40
MM3Z 47	WV	47	44.0	50.0	2	170	500	0.5	0.05	32.9	42.0	51.8	40
MM3Z 51	WW	51	48.0	54.0	2	180	500	0.5	0.05	35.7	46.6	57.2	40
MM3Z 56	XW	56	52.0	60.0	2	200	500	0.5	0.05	39.2	52.2	63.8	40
MM3Z 62	6E	62	58.0	66.0	2	215	500	0.5	0.05	43.3	58.8	71.6	35
MM3Z 68	6F	68	64.0	72.0	2	240	500	0.5	0.05	47.6	65.6	79.8	35
MM3Z 75	6H	75	70.0	79.0	2	255	500	0.5	0.05	52.5	73.4	88.6	35

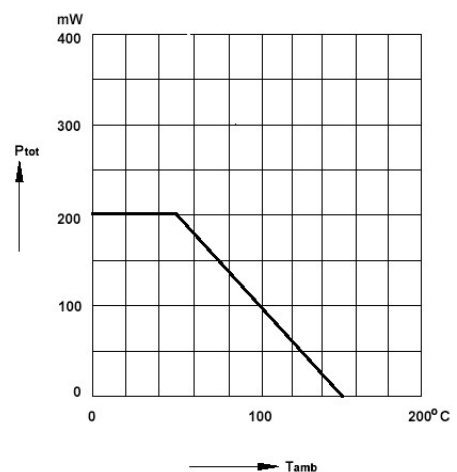
Breakdown characteristics at Tj=constant (pulsed)



Forward characteristics

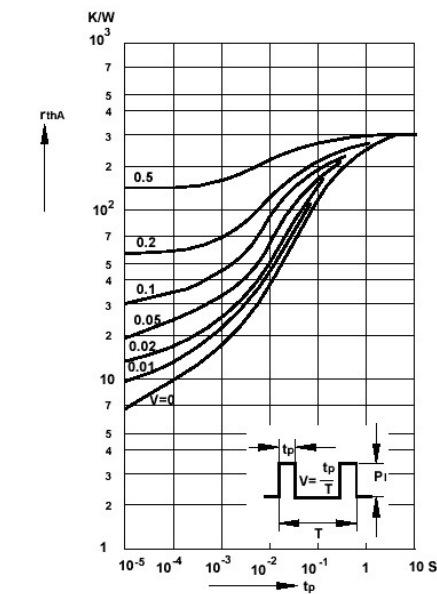


Admissible power dissipation versus ambient temperature

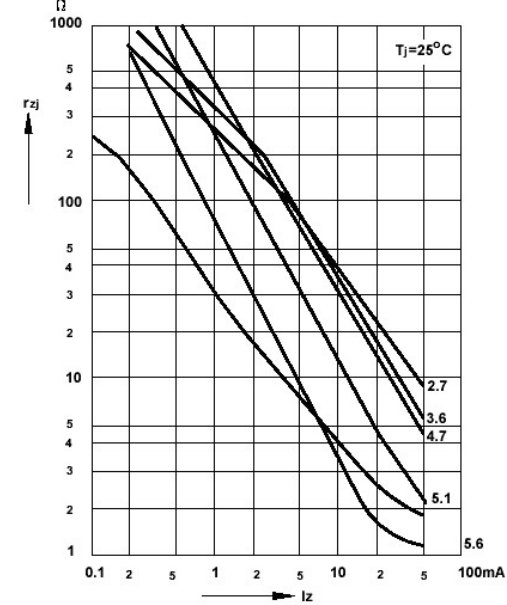


BZT52CxxS Series

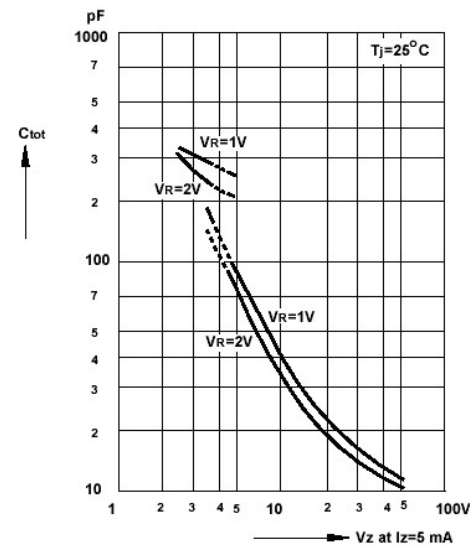
Pulse thermal resistance versus pulse duration



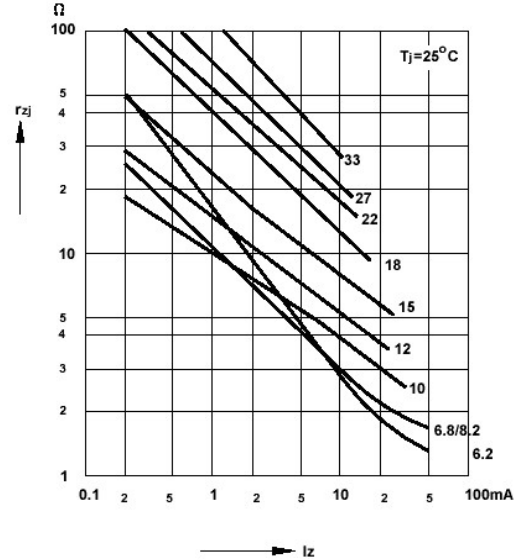
Dynamic resistance versus Zener current



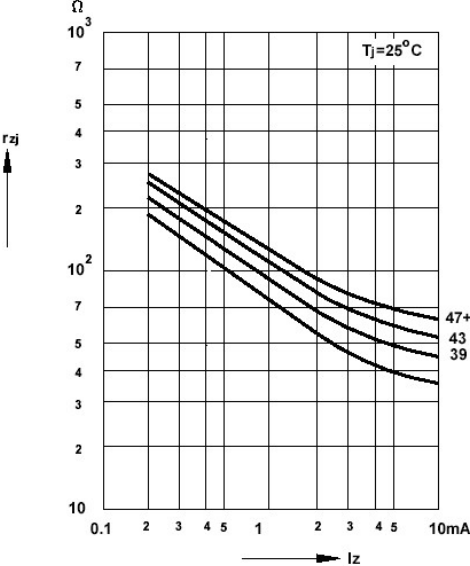
Capacitance versus Zener voltage



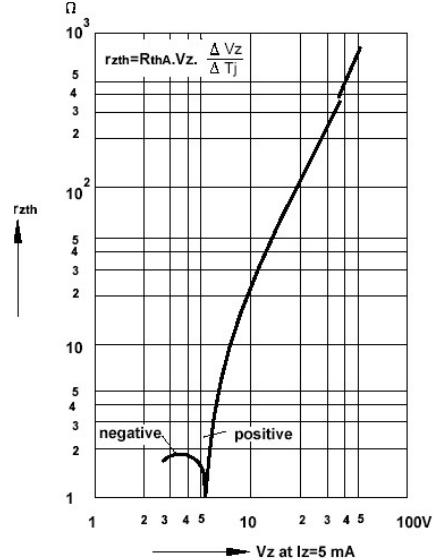
Dynamic resistance versus Zener current



Dynamic resistance versus Zener current

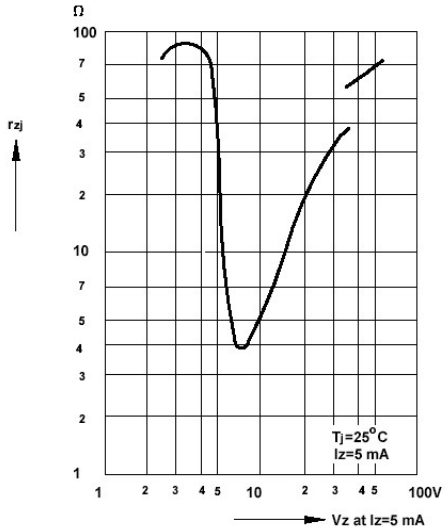


Thermal differential resistance versus Zener voltage

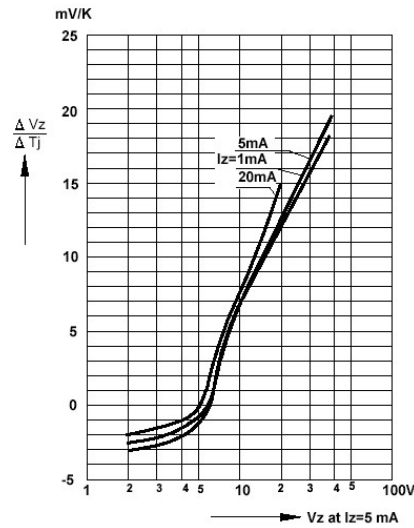


BZT52CxxS Series

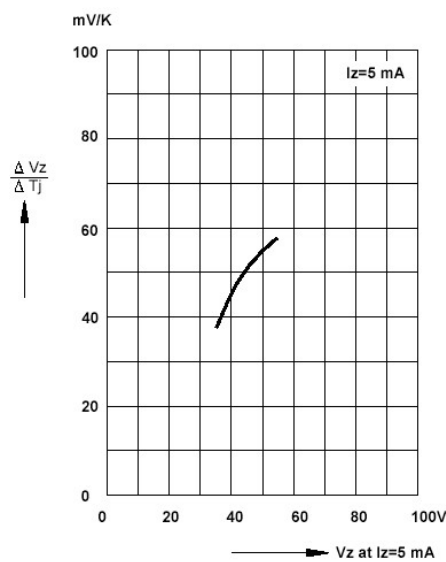
Dynamic resistance versus Zener voltage



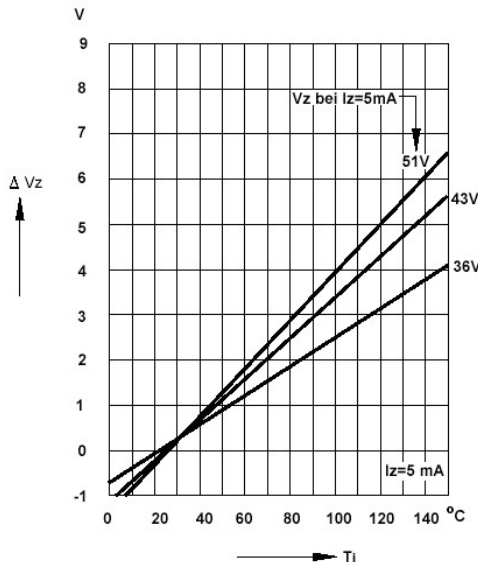
Temperature dependence of Zener voltage versus Zener voltage



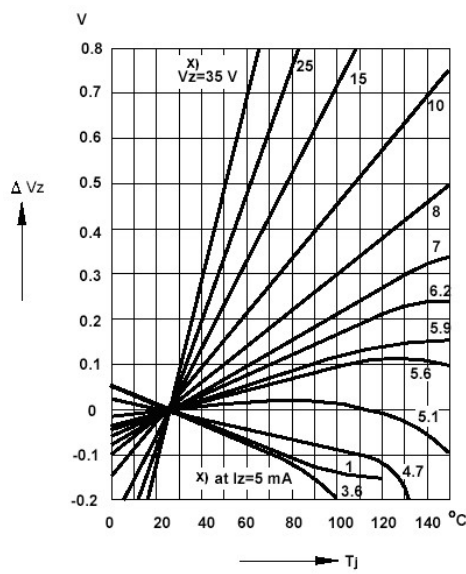
Temperature dependence of Zener voltage versus Zener voltage



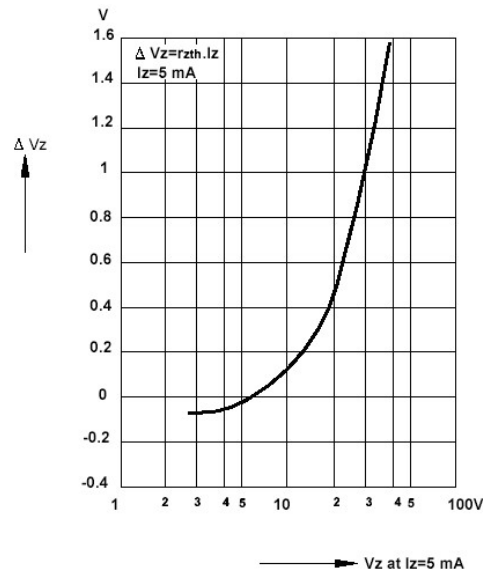
Change of Zener voltage versus junction temperature



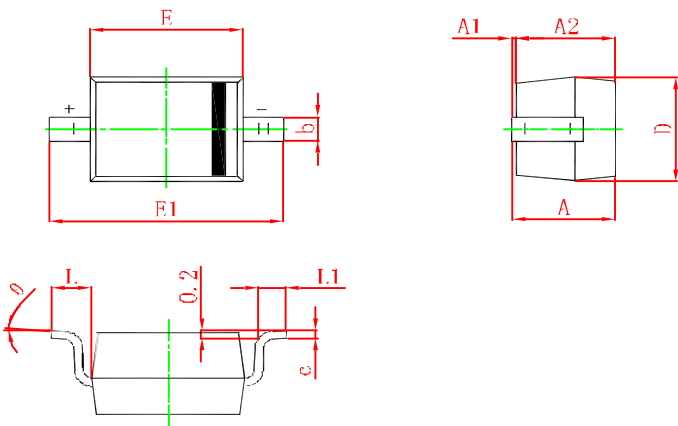
Change of Zener voltage versus junction temperature



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



SOD-323



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°