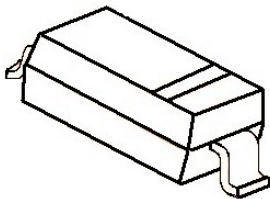




SOD-323

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)

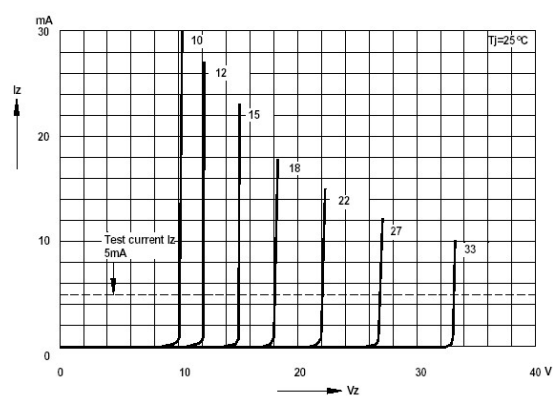
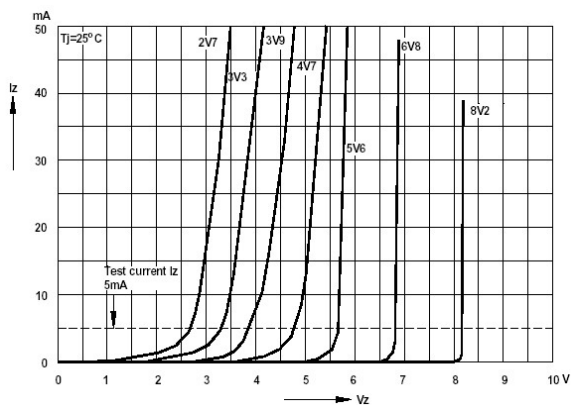
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Device	Marking	Zener Voltage Range				Maximum Zener Impedance ³⁾			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/°C		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω			mA	uA			V
UDZSTE-172.0B	WY	2.0	1.80	2.15	5	150	600	1.0	100	1.0	-3.5	0	5
UDZSTE-172.4B	WX	2.4	2.2	2.6	5	100	600	1.0	50	1.0	-3.5	0	5
UDZSTE-172.7B	W1	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0	5
UDZSTE-173.0B	W2	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0	5
UDZSTE-173.3B	W3	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0	5
UDZSTE-173.6B	W4	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0	5
UDZSTE-173.9B	W5	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0	5
UDZSTE-174.3B	W6	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0	5
UDZSTE-174.7B	W7	4.7	4.4	5.0	5	80	500	1.0	3	2.0	-3.5	0.2	5
UDZSTE-175.1B	W8	5.1	4.8	5.4	5	60	480	1.0	2	2.0	-2.7	1.2	5
UDZSTE-175.6B	W9	5.6	5.2	6.0	5	40	400	1.0	1	2.0	-2.0	2.5	5
UDZSTE-176.2B	WA	6.2	5.8	6.6	5	10	150	1.0	3	4.0	0.4	3.7	5
UDZSTE-176.8B	WB	6.8	6.4	7.2	5	15	80	1.0	2	4.0	1.2	4.5	5
UDZSTE-177.5B	WC	7.5	7.0	7.9	5	15	80	1.0	1	5.0	2.5	5.3	5
UDZSTE-178.2B	WD	8.2	7.7	8.7	5	15	80	1.0	0.7	5.0	3.2	6.2	5
UDZSTE-179.1B	WE	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5
UDZSTE-1710B	WF	10	9.4	10.6	5	20	150	1.0	0.2	7.0	4.5	8.0	5
UDZSTE-1711B	WG	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0	5
UDZSTE-1712B	WH	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0	5
UDZSTE-1713B	WI	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0	5

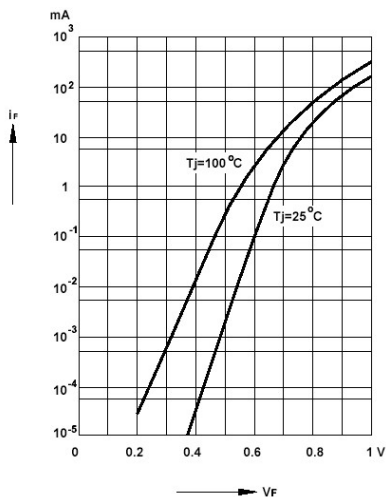


Device	Marking	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature coefficient @ IZTC=mV/℃		Test Current IZTC
		Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V			
UDZSTE-1715B	WJ	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0	5
UDZSTE-1716B	WK	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	14.0	5
UDZSTE-1718B	WL	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	16.0	5
UDZSTE-1720B	WM	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	18.0	5
UDZSTE-1722B	WN	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	20.0	5
UDZSTE-1724B	WO	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	22.0	5
UDZSTE-1727B	WP	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	25.3	2
UDZSTE-1730B	WQ	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	29.4	2
UDZSTE-1733B	WR	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	33.4	2
UDZSTE-1736B	WS	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	37.4	2
UDZSTE-1739B	WT	39	37.0	41.0	2	130	350	0.5	0.1	27.3	33.4	41.2	2
UDZSTE-1743B	WU	43	40.0	46.0	2	100	700	1.0	0.1	32.0	10.0	12.0	5
UDZSTE-1747B	WV	47	44.0	50.0	2	100	750	1.0	0.1	35.0	10.0	12.0	5
UDZSTE-1751B	WW	51	48.0	54.0	2	100	750	1.0	0.1	38.0	10.0	12.0	5
UDZSTE-1756B	XW	56	52.0	60.0	2	135	700	1.0	0.1	39.0	10.0	12.0	5
UDZSTE-1762B	6E	62	58.0	66.0	2	200	1000	1.0	0.2	47.0	10.0	12.0	5
UDZSTE-1768B	6F	68	64.0	72.0	2	250	1000	1.0	0.2	52.0	10.0	12.0	5
UDZSTE-1775B	6H	75	70.0	79.0	2	300	1000	1.0	0.2	57	10.0	12.0	5

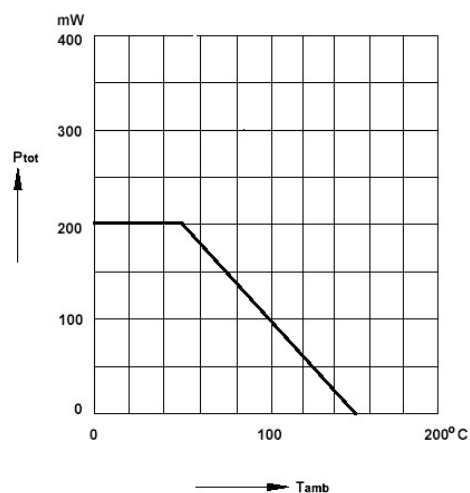
Breakdown characteristics
at Tj=constant (pulsed)



Forward characteristics

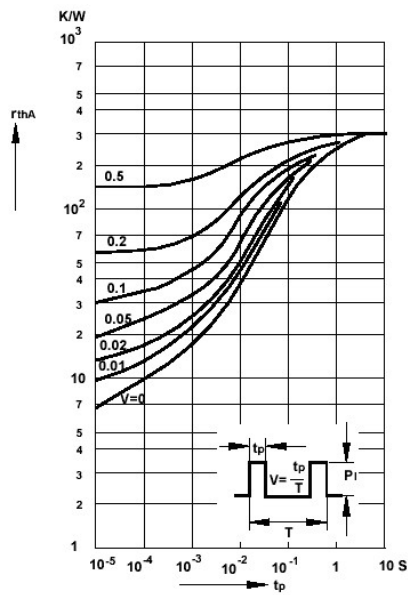


Admissible power dissipation versus ambient temperature

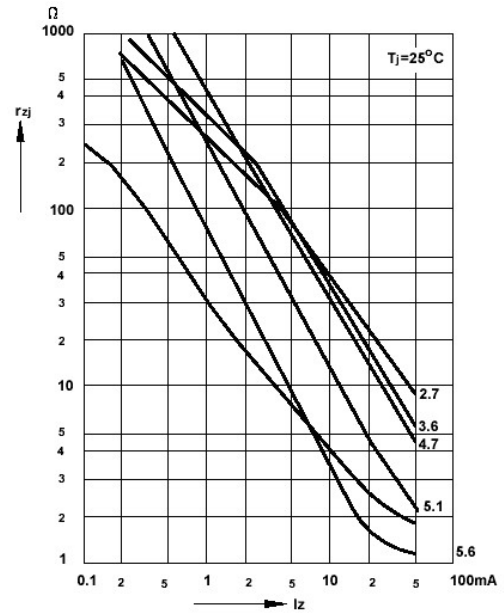




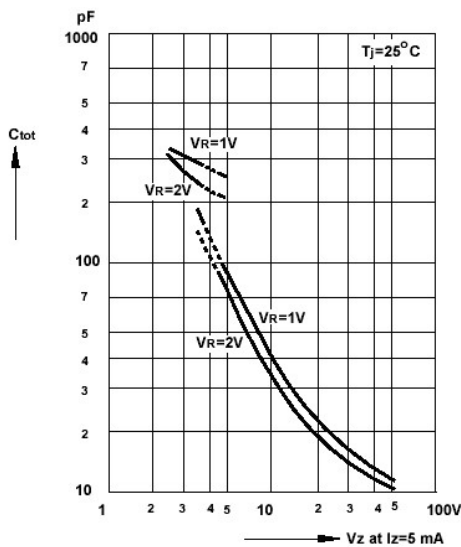
Pulse thermal resistance versus pulse duration



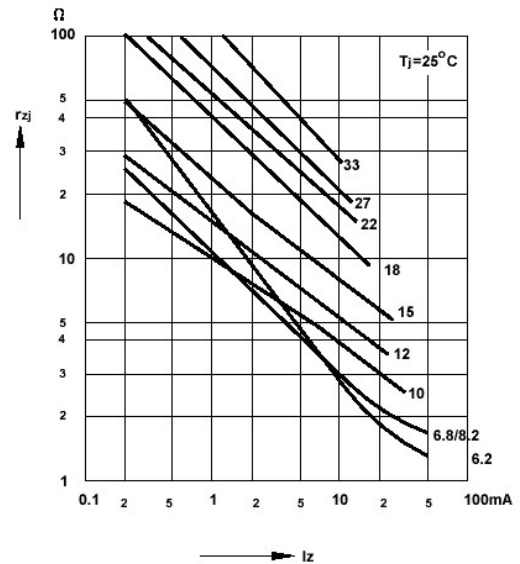
Dynamic resistance versus Zener current



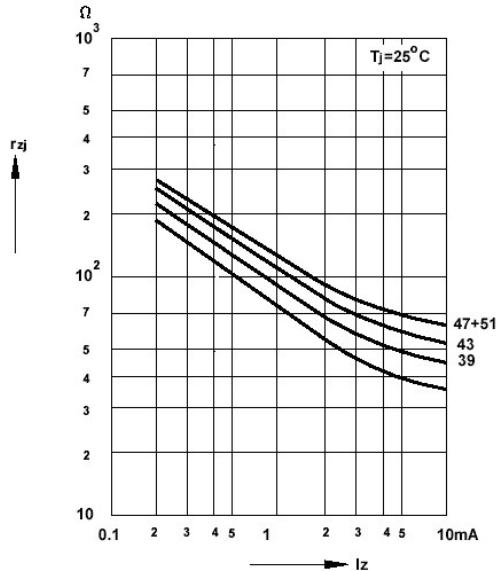
Capacitance versus Zener voltage



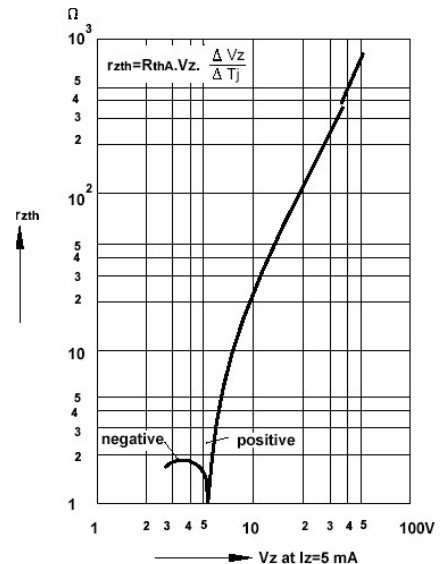
Dynamic resistance versus Zener current



Dynamic resistance versus Zener current

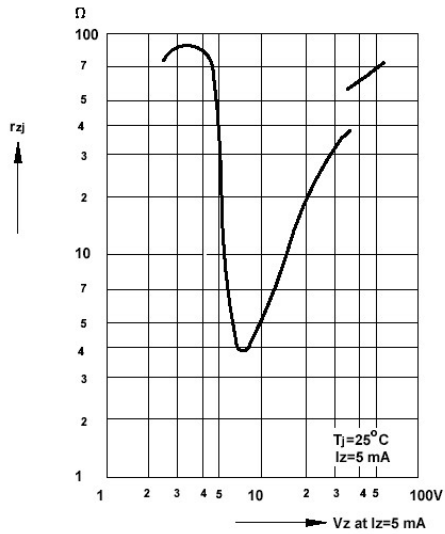


Thermal differential resistance versus Zener voltage

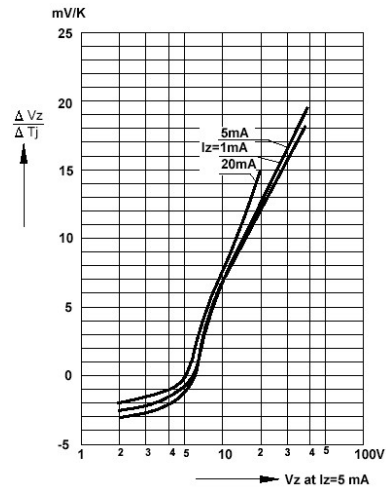




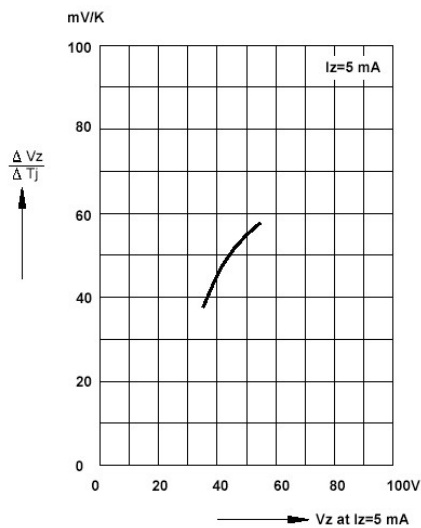
Dynamic resistance versus Zener voltage



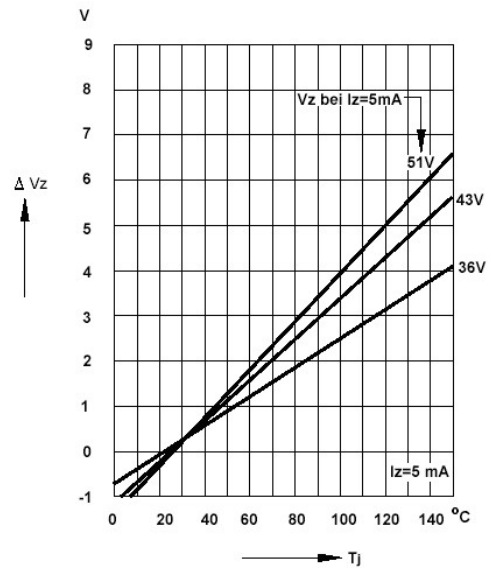
Temperature dependence of Zener voltage versus Zener voltage



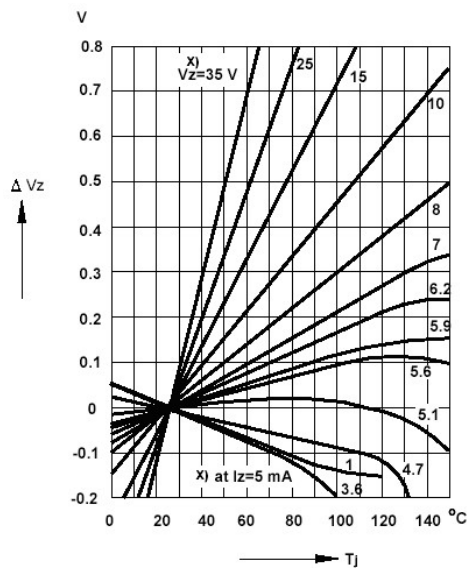
Temperature dependence of Zener voltage versus Zener voltage



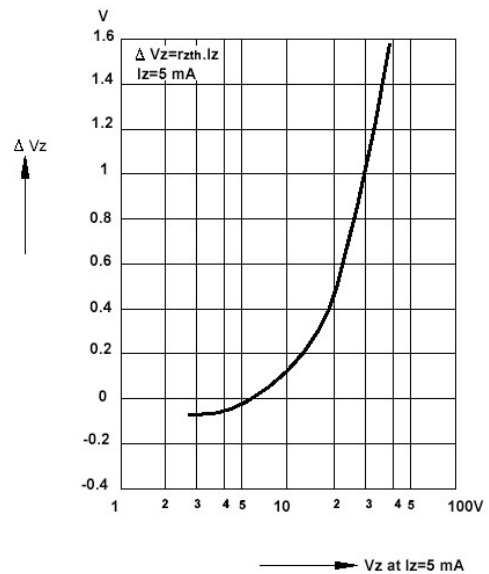
Change of Zener voltage versus junction temperature



Change of Zener voltage versus junction temperature



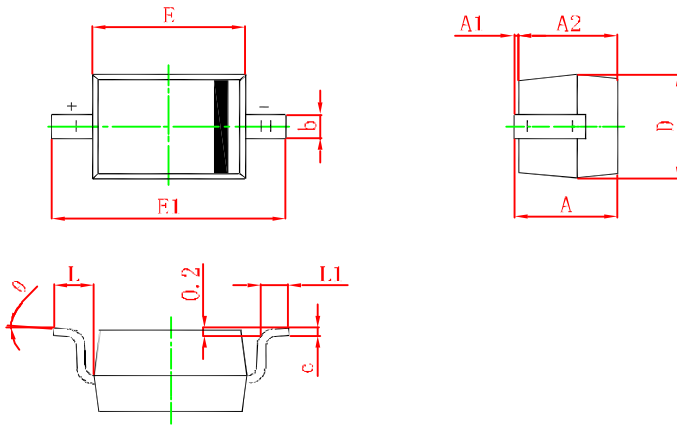
Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage





SOD-323 PACKAGE OUTLINE Plastic surface mounted package

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°