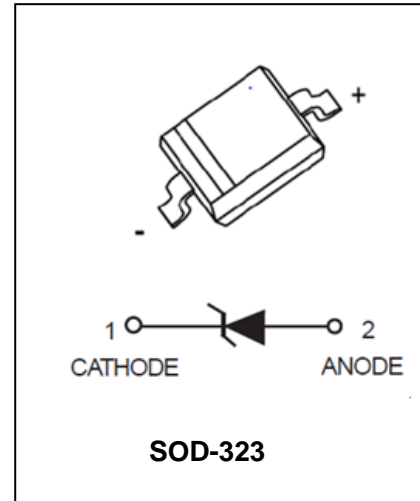


### FEATURES

- Miniaturized package size for high density applications
- 2 % high precision regulated voltage stability
- High reliability chip and packaging process
- AEC-Q101 qualified

### APPLICATIONS

- Mobile phone
- Portable device
- High precision computer motherboard



### ORDERING INFORMATION

Type No.	Marking	Package Code
BZT52B5V1SQ	See Page2-3	SOD-323

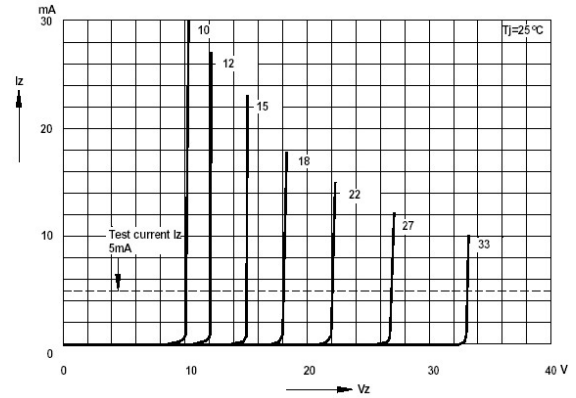
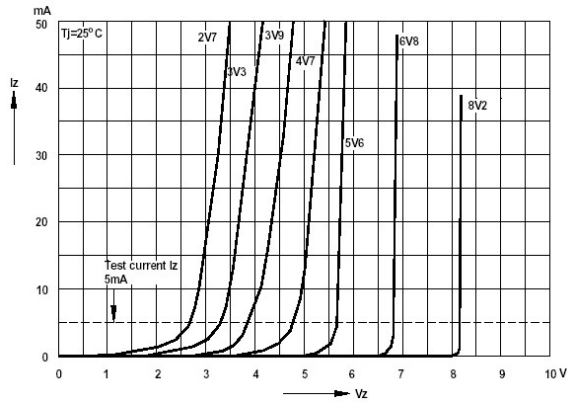
### MAXIMUM RATING @ Ta=25°C unless otherwise specified

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

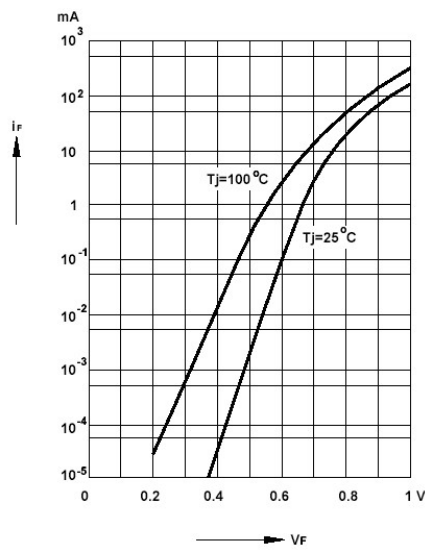
- 1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm<sup>2</sup>
- 2) Short duration test pulse used to minimize self-heating effect
- 3) f=1KHz

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	Min	Max	
		Nom(V)	Min(V)	Max(V)	mA	Ω	mA	uA	V	mA			
BZT52B5V1SQ	2W8	5.1	5.00	5.20	5	60	480	1.0	2	2.0	-2.7	1.2	5

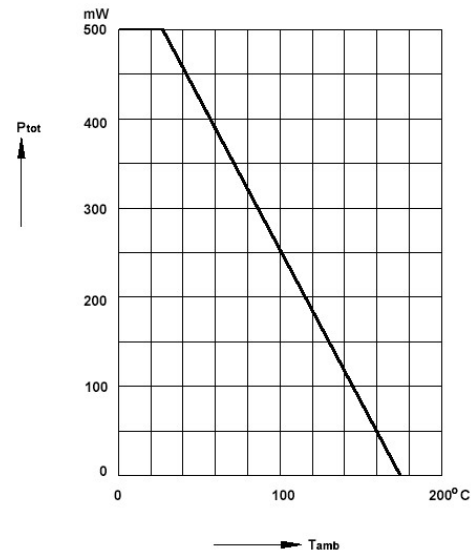
### Breakdown characteristics at Tj=constant (pulsed)



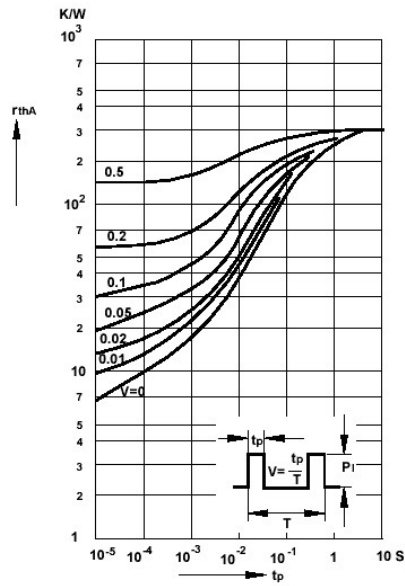
### Forward characteristics



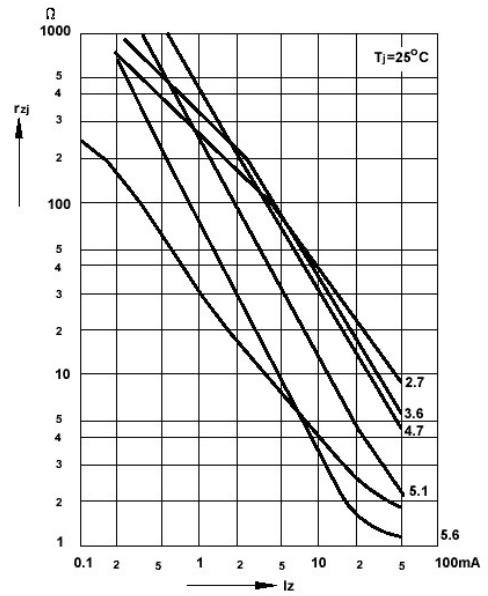
### Admissible power dissipation versus ambient temperature



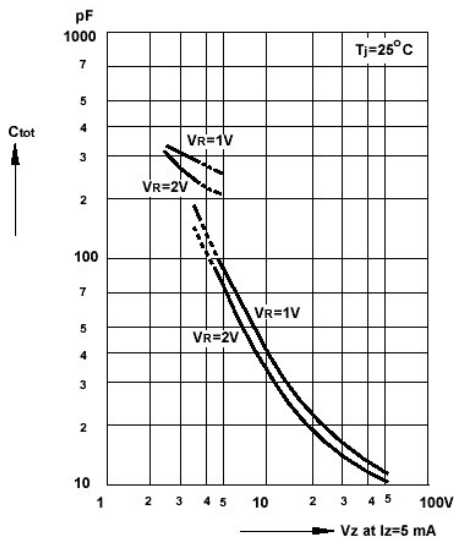
Pulse thermal resistance versus pulse duration



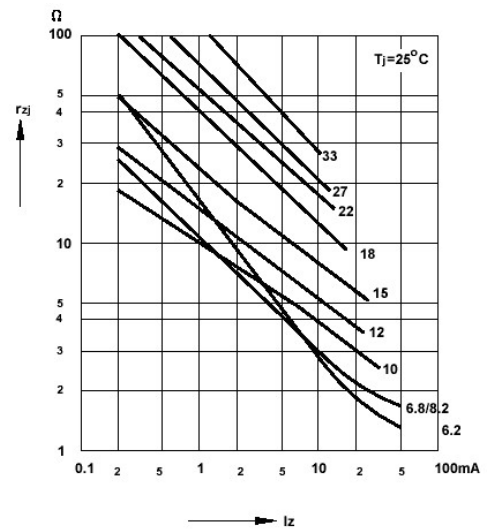
Dynamic resistance versus Zener current



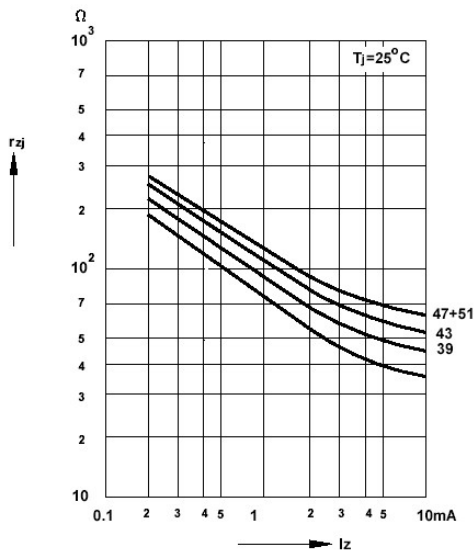
Capacitance versus Zener voltage



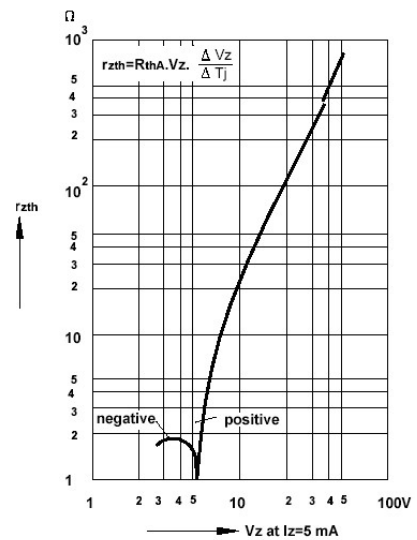
Dynamic resistance versus Zener current



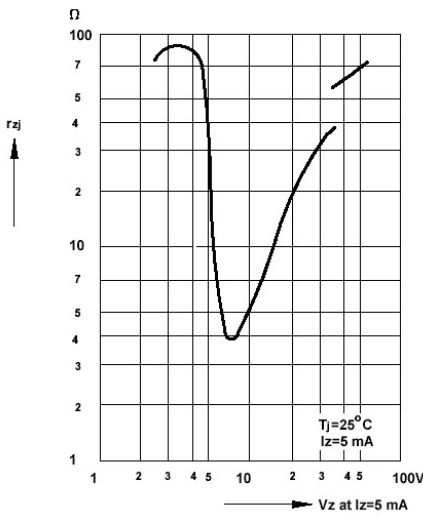
Dynamic resistance versus Zener current



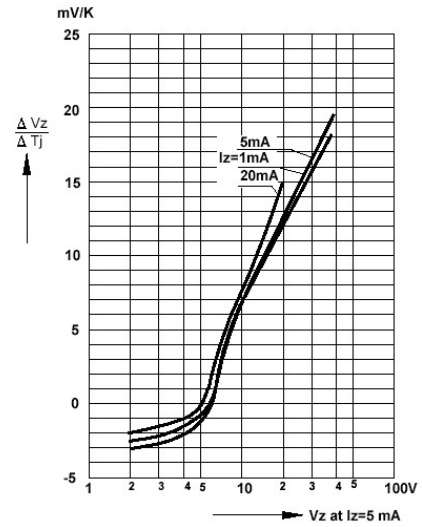
Thermal differential resistance versus Zener voltage



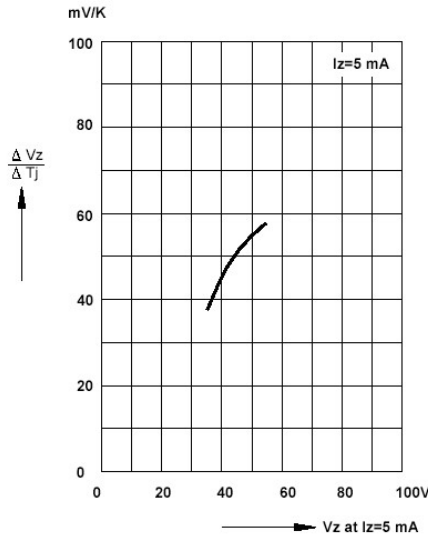
Dynamic resistance versus Zener voltage



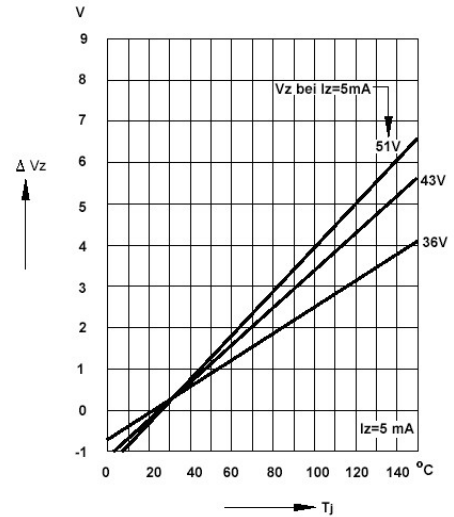
Temperature dependence of Zener voltage versus Zener voltage



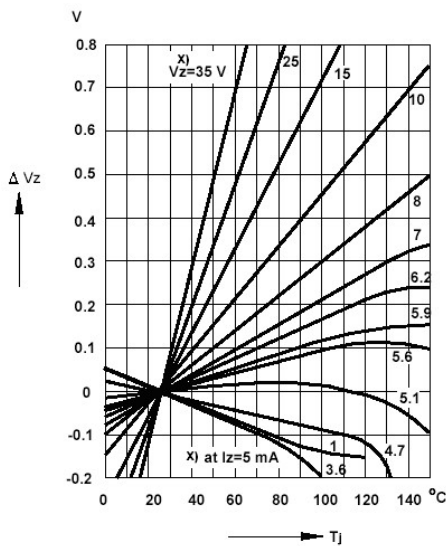
Temperature dependence of Zener voltage versus Zener voltage



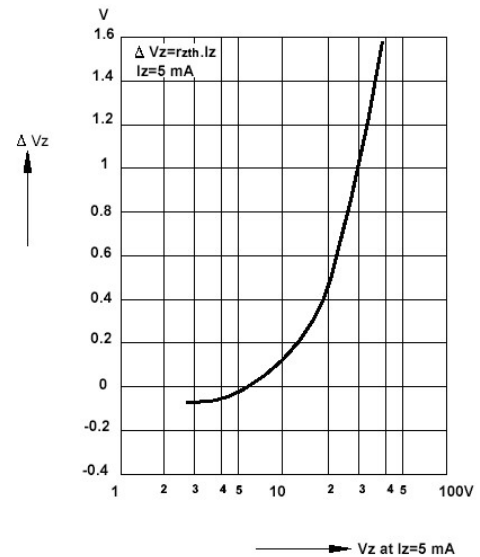
Change of Zener voltage versus junction temperature



Change of Zener voltage versus junction temperature

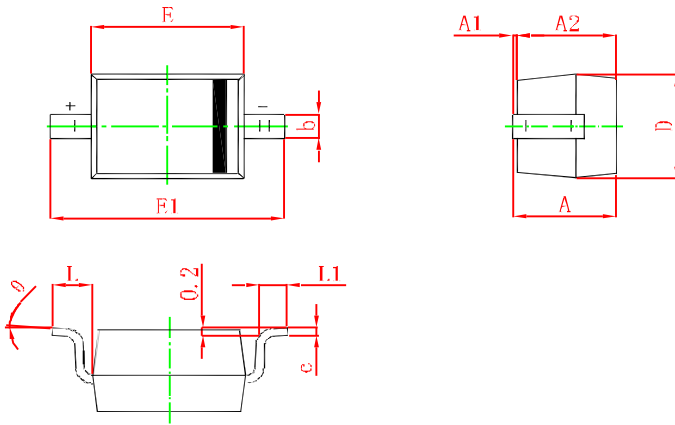


Change of Zener voltage from turn-on up to the point of thermal equilibrium versus Zener voltage



## SOD-323 PACKAGE OUTLINE Plastic surface mounted package

### SOD-323



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