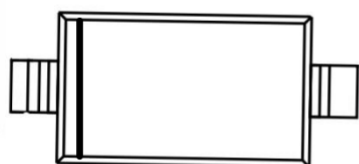


Features

- Low Zener Impedance
- Power Dissipation of 500mW
- High Stability and High Reliability
- Halogen free and RoHS compliant
- SOD123 surface mount package

Applications

- General voltage regulation
- Mobile & handheld systems



SOD123



Pin Configuration

Maximum Ratings& Thermal Characteristics

(Tamb=25°C unless otherwise specified)

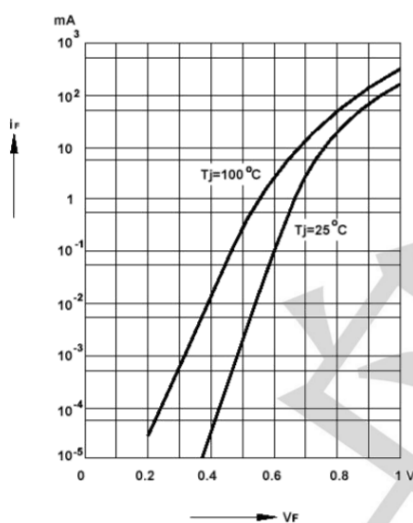
Parameter	Symbol	Value	Unit
Forward Voltage @ IF=10mA	VF	0.9	V
Power Dissipation	PD	500	mW
Thermal Resistance (Junction-to-Ambient)	RθJA	250	°C/W
Thermal Resistance (Junction-to-Case)	RθJC	140	°C/W
Junction Temperature Range	TJ	-55 ~ +150	°C
Storage Temperature Range	TSTG	-65 ~ +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

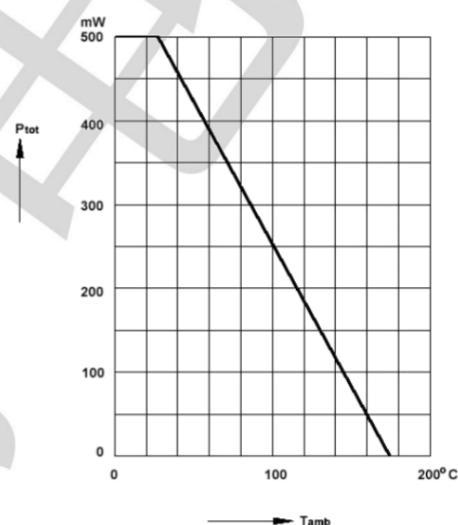
Device	Zener Voltage Range				Maximum Zener Impedance		Maximum Reverse Current			Typical Temperature coefficient @ IZTC=mV/°C		Test Current IZTC
	Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
	Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V	Min	Max	mA
BZT52C9V1-TP	9.1	8.5	9.6	5	15	100	1.0	0.5	6.0	3.8	7.0	5

Typical Characteristics Curves

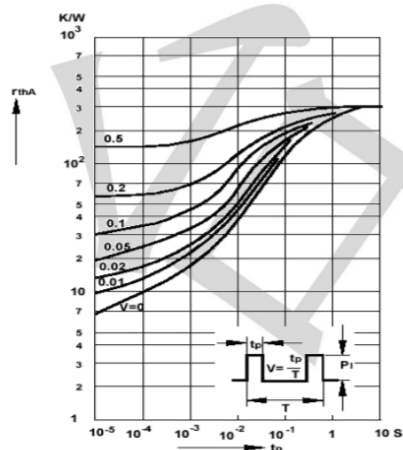
Forward characteristics



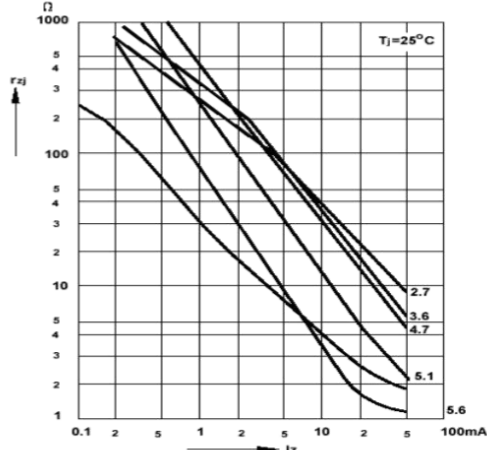
Admissible power dissipation versus ambient temperature



Pulse thermal resistance versus pulse duration

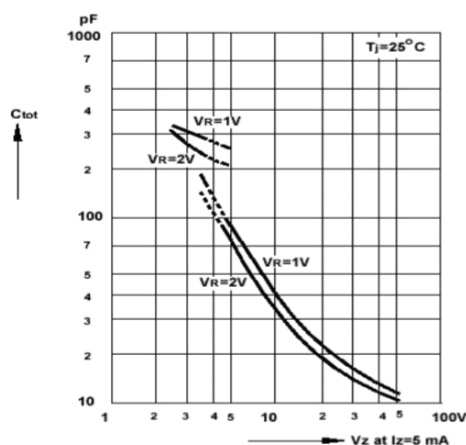


Dynamic resistance versus Zener current

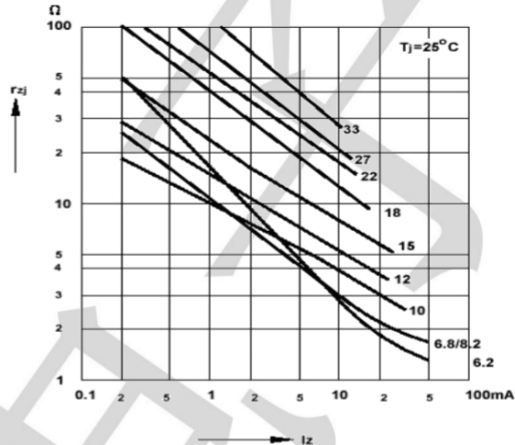


Typical Characteristics Curves

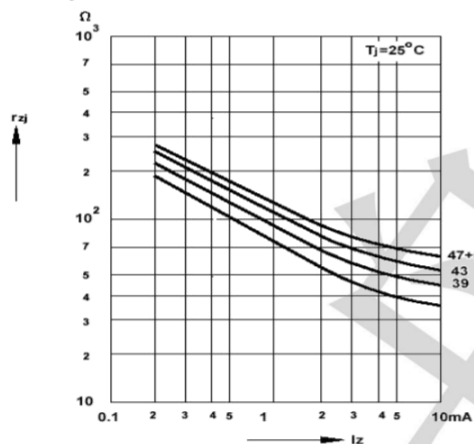
Capacitance versus Zener voltage



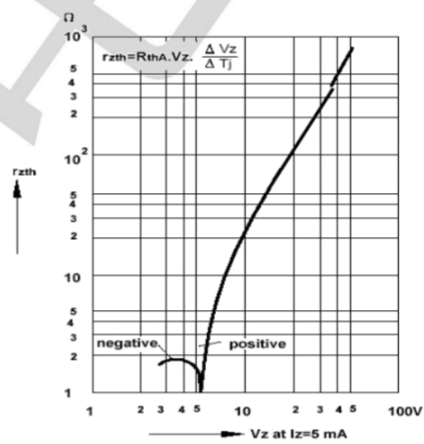
Dynamic resistance versus Zener current



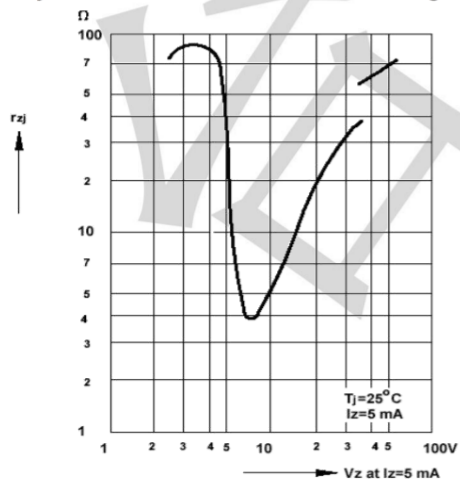
Dynamic resistance versus Zener current



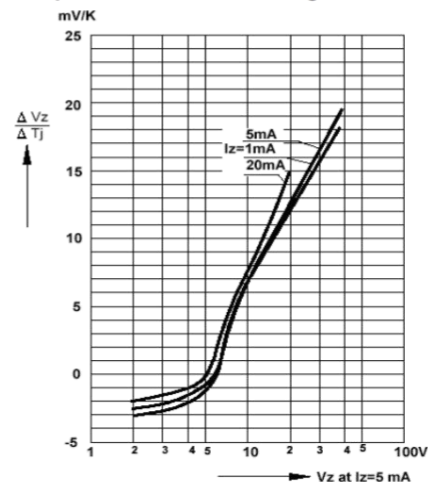
Thermal differential resistance versus Zener voltage



Dynamic resistance versus Zener voltage

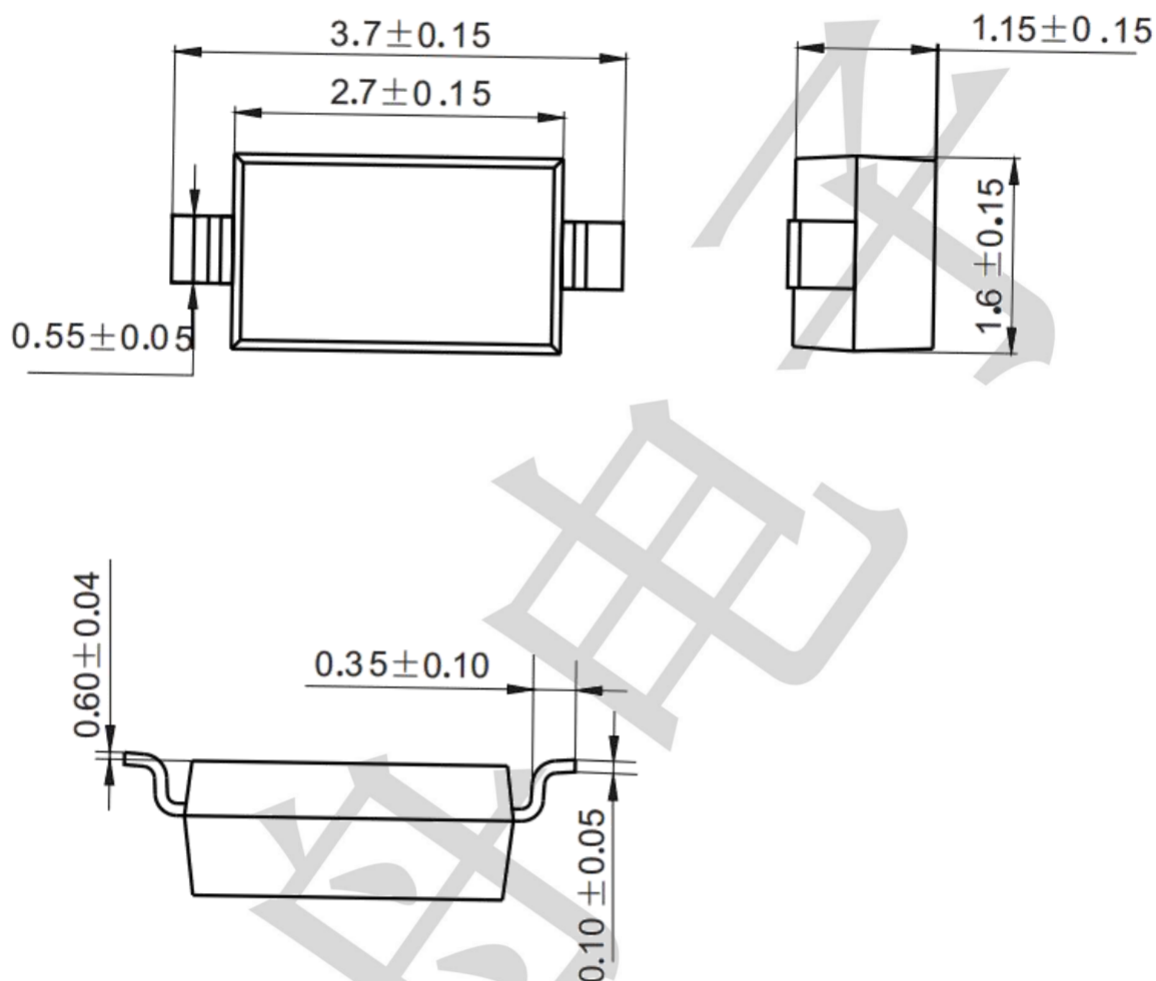


Temperature dependence of Zener voltage versus Zener voltage



Package Outline Dimensions (unit: mm)

SOD123



Mounting Pad Layout (unit: mm)

