



## Features

Planar die construction.  
200mW power dissipation on ceramic PBC.  
General purpose, medium current.  
Ideally suited for automated assembly processes.  
Available in lead free version.



SOD-123



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BZT52C20-7-F	SOD-123	WM	3000

## Absolute Maximum Ratings(Ta=25°C)

Symbol	Parameter	Value	Unit
V <sub>F</sub>	Forward Voltage (Note 2) @ I <sub>F</sub> =10mA	0.9	V
P <sub>d</sub>	Power Dissipation (Note 1)	500	mW
R <sub>ΘJA</sub>	Thermal Resistance From Junction To Ambient	625	°C/W
T <sub>J</sub>	Operation Junction Temperature Range	-40~+125	°C
T <sub>STG</sub>	Storage Temperature Range	-55~+150	°C

## Electrical Characteristics (Ta=25°C unless otherwise specified)

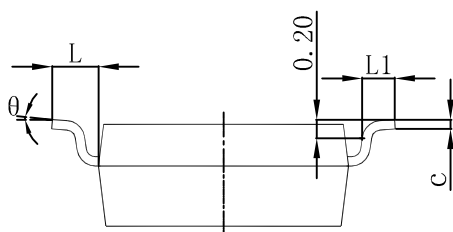
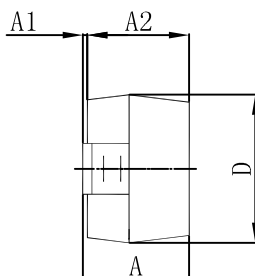
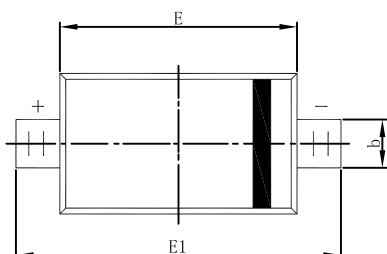
Type	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current (Note 2)		Typical Temperature Coefficient @ I <sub>ZTC</sub> mV/°C		Test Current I <sub>ZTC</sub>
	V <sub>Z</sub> @ I <sub>ZT</sub> (V)			I <sub>ZT</sub>	V <sub>Z</sub> @ I <sub>ZT</sub>	V <sub>Z</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	V <sub>R</sub>			
	Nom	Min	Max	(mA)	Ω		(mA)	μA	V	Min	Max	mA
BZT52C20-7-F	20	19	21	5	19	52.2	1.0	0.04	14	14.4	18	5

Notes:

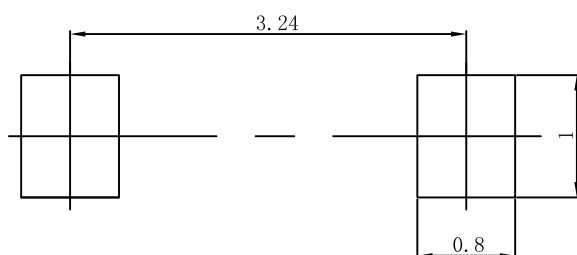
1. Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm<sup>2</sup>.
2. Short duration test pulse used to minimize self-heating effect.
3. f = 1kHz.



## Package Outline Dimensions SOD-123



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.



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