



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)
BZT52C9V1Q-7-F	SOD-123	WE	3000



Absolute Maximum Ratings(Ta=25°C)

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

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

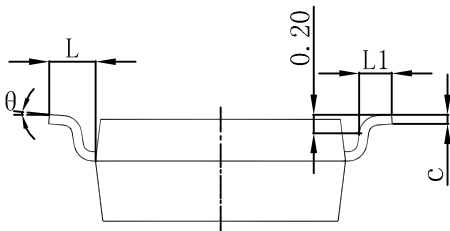
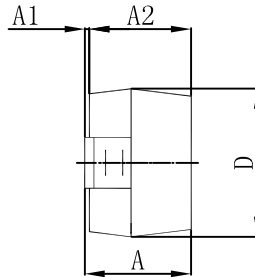
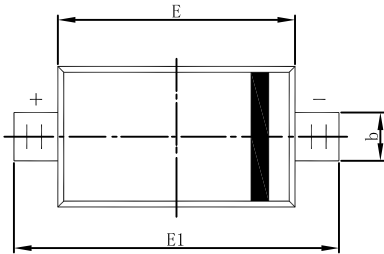
Type	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current (Note 2)		Typical Temperature Coefficient @I _{ZTC} mV/°C		Test Current I _{ZTC}
	V _Z @I _{ZT} (V)			I _{ZT} (mA)	V _Z @I _{ZT}	V _Z @I _{ZK}	I _{ZK} (mA)	I _R μA	V _R V	Min	Max	mA
	Nom	Min	Max									
BZT52C9V1Q-7-F	9.1	8.65	9.56	5	14.2	95	1.0	0.16	7	3.8	7.0	5

Notes:

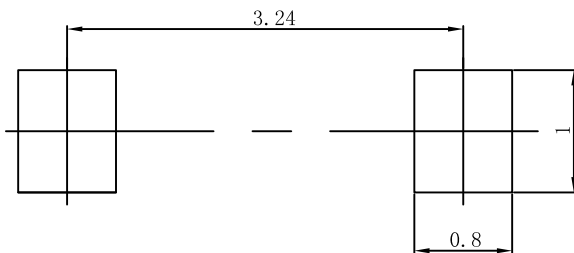
- Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm².
- Short duration test pulse used to minimize self-heating effect.
- f = 1kHz.



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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