

ZENER DIODE

FEATURES

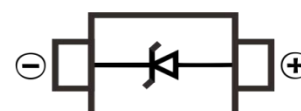
- Low Forward Voltage
- Surface Mount device
- For use in low voltage high frequency inverters and polarity protection applications

MECHANICAL DATA

- Case: SOD-523
- Case material: Molded plastic. UL flammability
- Classification rating: 94V-0
- Terminals: Tin plated, solderable per MIL-STD-202, Method 208
- Weight: 0.0015grams (approximate)



SOD-523



Absolute Maximum Ratings $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$
T_{OPR}	Operating Temperature Range	-55 to +150	$^{\circ}\text{C}$

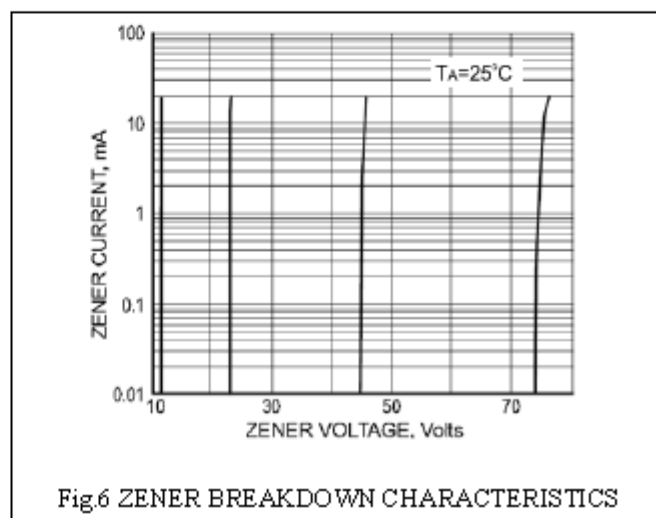
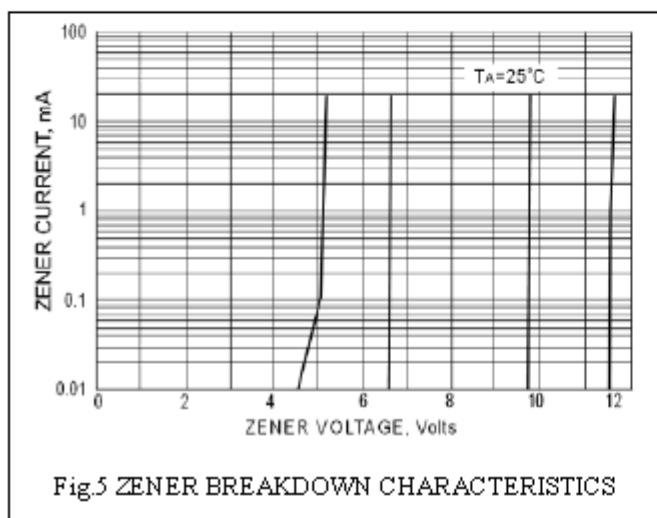
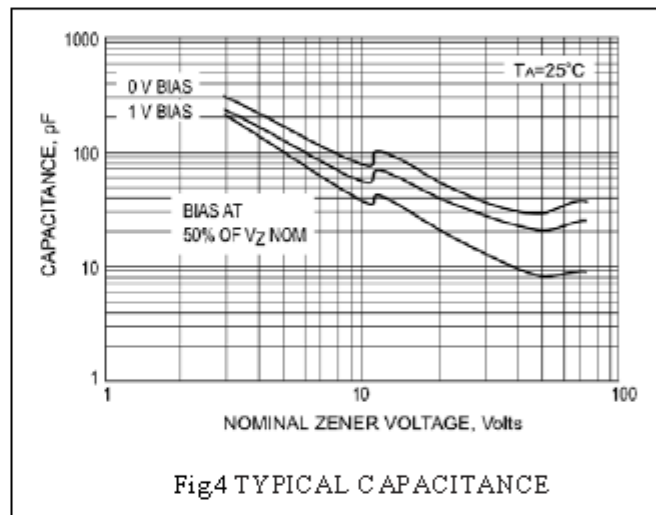
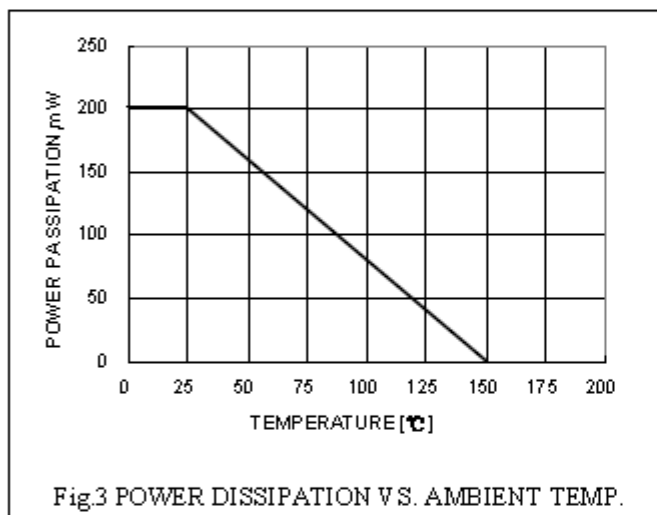
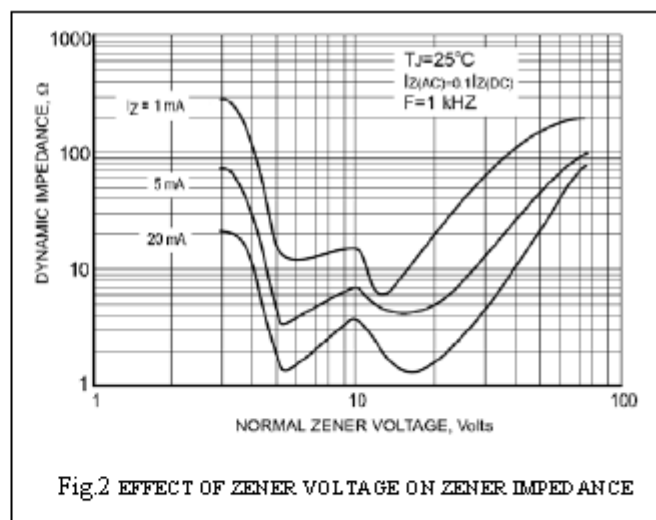
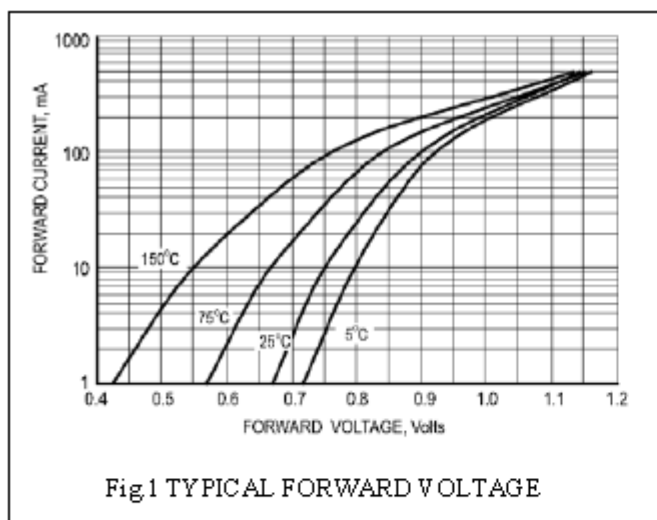
These ratings are limiting values above which the serviceability of diode may be impaired.

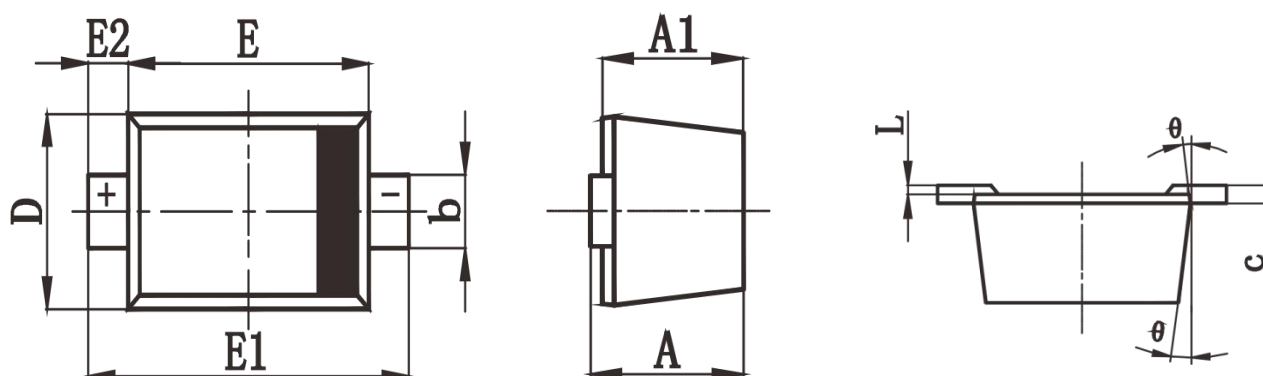
Electrical Characteristics $T_A=25^{\circ}\text{C}$ unless otherwise noted

Device Type	Device Marking	$V_Z@I_{ZT}$ (Volts)			I_{ZT} (mA)	$Z_{ZT}@I_{ZT}$ (Ω) Max	I_{ZK} (mA)	$Z_{ZK}@I_{ZK}$ (Ω) Max	$I_R@V_R$ (μA) Max	V_R (Volts)
		Min	Nom	Max						
BZX584C13	OP	12.4	13	14.1	5	30	1	80	0.1	8

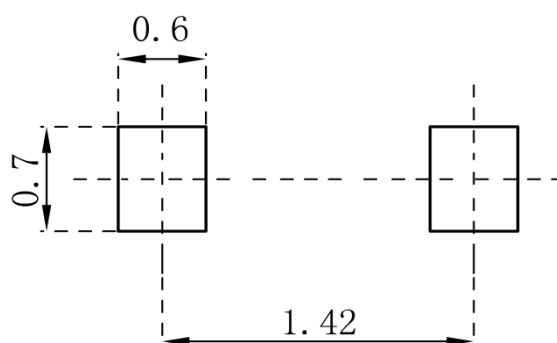
ZENER DIODE

RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$ unless otherwise noted)

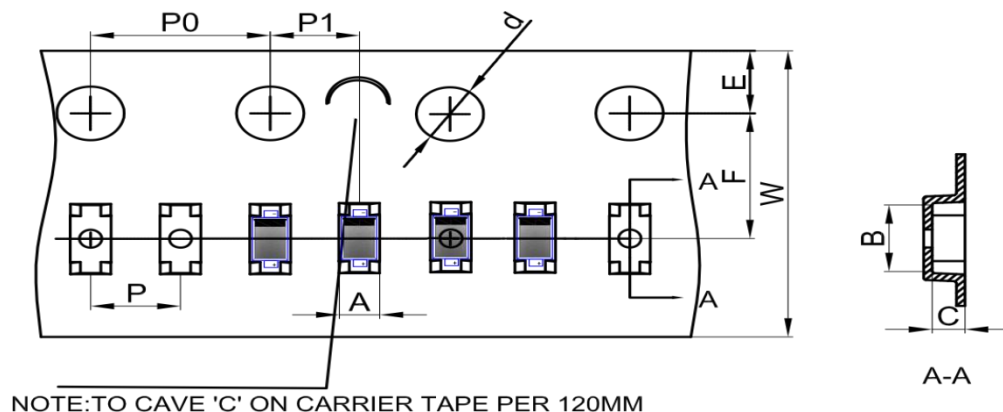


ZENER DIODE
SOD-523 Package Outline Dimensions


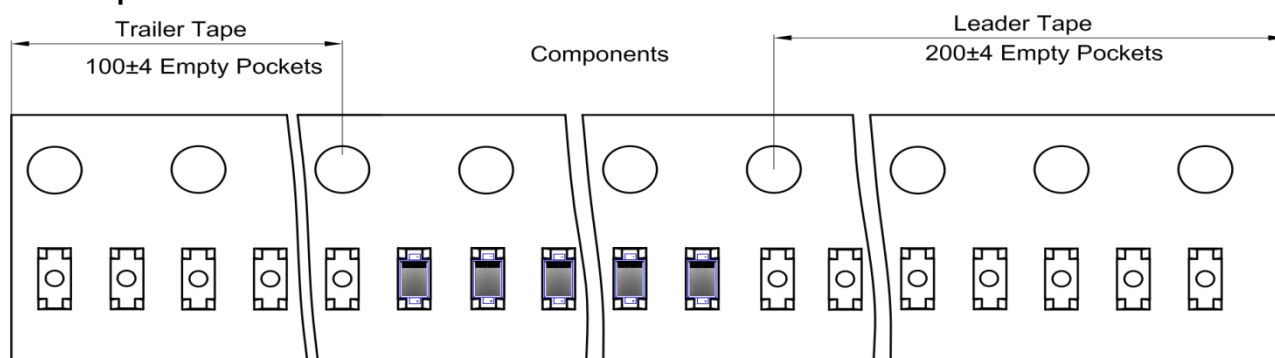
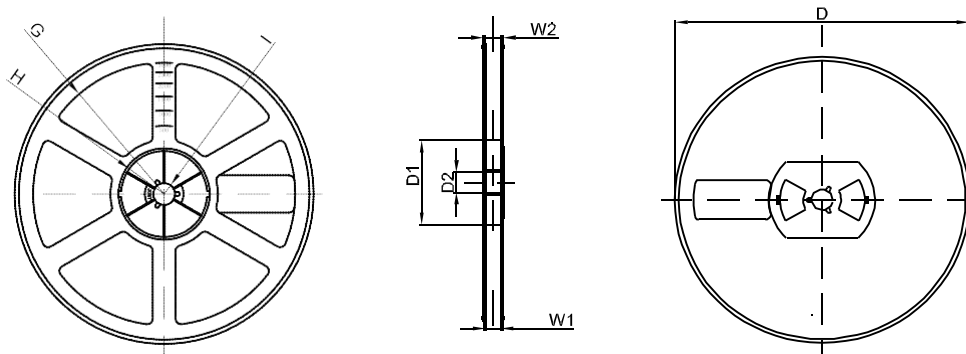
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.510	0.770	0.020	0.031
A1	0.010	0.070	0.001	0.003
A2	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
L	0.200 RE F		0.008 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-523 Suggested Pad Layout

Note:

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

ZENER DIODE
SOD-523 Tape and Reel
SOD-523 Embossed Carrier Tape


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-523	0.90	1.94	0.73	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-523 Tape Leader and Trailer

SOD-523 Reel


DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1