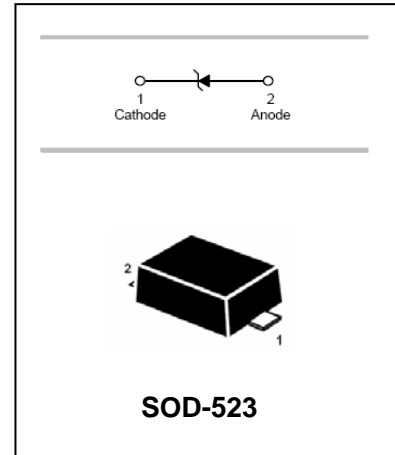


Zener Diode

BZX584C2V4-BZX584C51

FEATURES

- Zener voltages:2.4V~51V.
- Power dissipation P_D :200mW.



APPLICATIONS

- Zener diodes.

ORDERING INFORMATION

Type No.	Marking	Package Code
BZX584C2V4-BZX584C51	see table on page 2	SOD-523

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
Total power dissipation	P_{tot}	200	mW
Total resistance junction to ambient	$R_{\theta JA}$	680	$^\circ\text{C}/\text{W}$
Total resistance junction to soldering point	$R_{\theta JS}$	100	$^\circ\text{C}/\text{W}$
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Type Number	Marking	Zener voltage range			Maximum zener impedance				Maximum Reverse current		Typical Temperature Coefficient @ I_{ZT} mV/ $^\circ\text{C}$	
											Min	Max
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$		I_R	V_R	Min	Max
Nom(V)	Min(V)	Max(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)				
BZX584C2V4	Z11	2.4	2.2	2.6	5.0	100	600	1.0	50	1.0	-3.5	0
BZX584C2V7	Z12	2.7	2.5	2.9	5.0	100	600	1.0	20	1.0	-3.5	0
BZX584C3V0	Z13	3.0	2.8	3.2	5.0	95	600	1.0	10	1.0	-3.5	0
BZX584C3V3	Z14	3.3	3.1	3.5	5.0	95	600	1.0	5.0	1.0	-3.5	0
BZX584C3V6	Z15	3.6	3.4	3.8	5.0	90	600	1.0	5.0	1.0	-3.5	0
BZX584C3V9	Z16	3.9	3.7	4.1	5.0	90	600	1.0	3.0	1.0	-3.5	0
BZX584C4V3	Z17	4.3	4.0	4.6	5.0	90	600	1.0	3.0	1.0	-3.5	0
BZX584C4V7	Z1	4.7	4.4	5.0	5.0	80	500	1.0	3.0	2.0	-3.5	0.2



Zener Diode

BZX584C2V4-BZX584C51

Type Number	Marking	Zener voltage range				Maximum zener impedance			Maximum Reverse current		Typical Temperature Coefficient @ I_{ZT} mV/°C	
		$V_Z@I_{ZT}$			I_{ZT} (mA)	$Z_{ZT}@I_{ZT}$ (Ω)	$Z_{ZK}@I_{ZK}$ (Ω)	I_R (μ A)	V_R (V)	Min	Max	
		Nom(V)	Min(V)	Max(V)								
BZX584C5V1	Z2	5.1	4.8	5.4	5.0	60	480	1.0	2.0	2.0	-2.7	1.2
BZX584C5V6	Z3	5.6	5.2	6.0	5.0	40	400	1.0	1.0	2.0	-2.0	2.5
BZX584C6V2	Z4	6.2	5.8	6.6	5.0	10	150	1.0	3.0	4.0	0.4	3.7
BZX584C6V8	Z5	6.8	6.4	7.2	5.0	15	80	1.0	2.0	4.0	1.2	4.5
BZX584C7V5	Z6	7.5	7.0	7.9	5.0	15	80	1.0	1.0	5.0	2.5	5.3
BZX584C8V2	Z7	8.2	7.7	8.7	5.0	15	80	1.0	0.7	5.0	3.2	6.2
BZX584C9V1	Z8	9.1	8.5	9.6	5.0	15	100	1.0	0.5	6.0	3.8	7.0
BZX584C10	Z9	10	9.4	10.6	5.0	20	150	1.0	0.2	7.0	4.5	8.0
BZX584C11	Y1	11	10.4	11.6	5.0	20	150	1.0	0.1	8.0	5.4	9.0
BZX584C12	Y2	12	11.4	12.7	5.0	25	150	1.0	0.1	8.0	6.0	10.0
BZX584C13	Y3	13	12.4	14.1	5.0	30	170	1.0	0.1	8.0	7.0	11.0
BZX584C15	Y4	15	13.8	15.6	5.0	30	200	1.0	0.1	10.5	9.2	13.0
BZX584C16	Y5	16	15.3	17.1	5.0	40	200	1.0	0.1	11.2	10.4	14.0
BZX584C18	Y6	18	16.8	19.1	5.0	45	225	1.0	0.1	12.6	12.4	16.0
BZX584C20	Y7	20	18.8	21.2	5.0	55	225	1.0	0.1	14.0	14.4	18.0
BZX584C22	Y8	22	20.8	23.3	5.0	55	250	1.0	0.1	15.4	16.4	20.0
BZX584C24	Y9	24	22.8	25.6	5.0	70	250	1.0	0.1	16.8	18.4	22.0
BZX584C27	Y10	27	25.1	28.9	2.0	80	300	0.5	0.1	18.9	21.4	25.3
BZX584C30	Y11	30	28.0	32.0	2.0	80	300	0.5	0.1	21.0	24.4	29.4
BZX584C33	Y12	33	31.0	35.0	2.0	80	325	0.5	0.1	23.1	27.4	33.4
BZX584C36	Y13	36	34.0	38.0	2.0	90	350	0.5	0.1	25.2	30.4	37.4
BZX584C39	Y14	39	37.0	41.0	2.0	130	350	0.5	0.1	27.3	33.4	41.2
BZX584C43	Y15	43	40.0	46.0	2.0	150	375	0.5	0.1	30.1	10.0	12.0
BZX584C47	Y16	47	44.0	50.0	2.0	170	375	0.5	0.1	32.9	10.0	12.0
BZX584C51	Y17	51	48.0	54.0	2.0	180	400	0.5	0.1	35.7	10.0	12.0

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Zener Diode

BZX584C2V4-BZX584C51

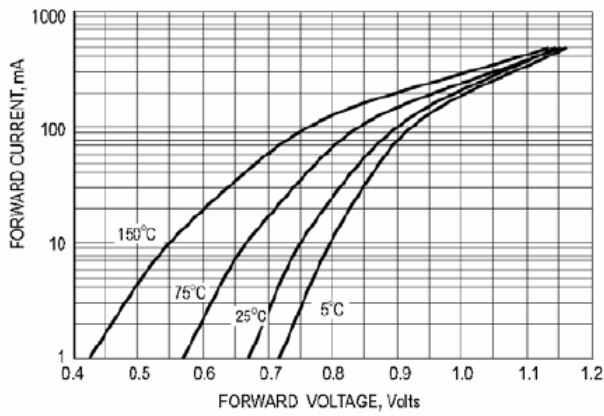


Fig.1 TYPICAL FORWARD VOLTAGE

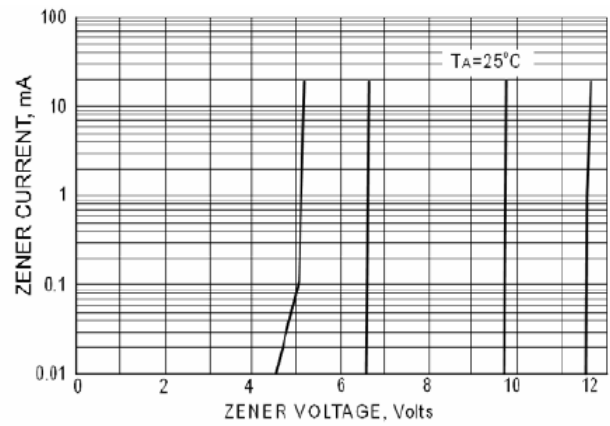


Fig.2 ZENER BREAKDOWN CHARACTERISTICS

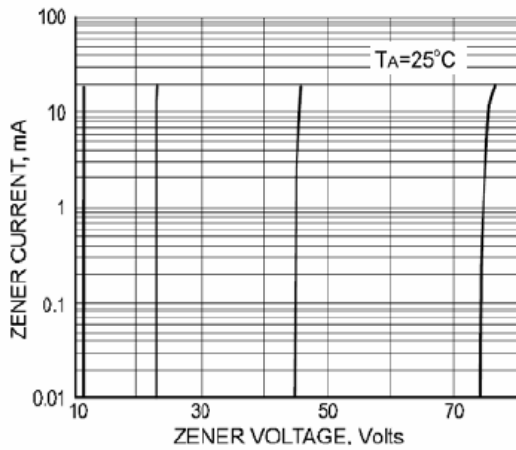


Fig.3 ZENER BREAKDOWN CHARACTERISTICS

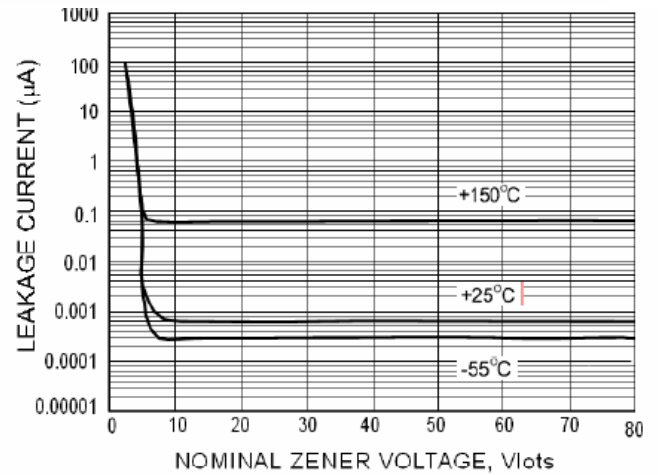
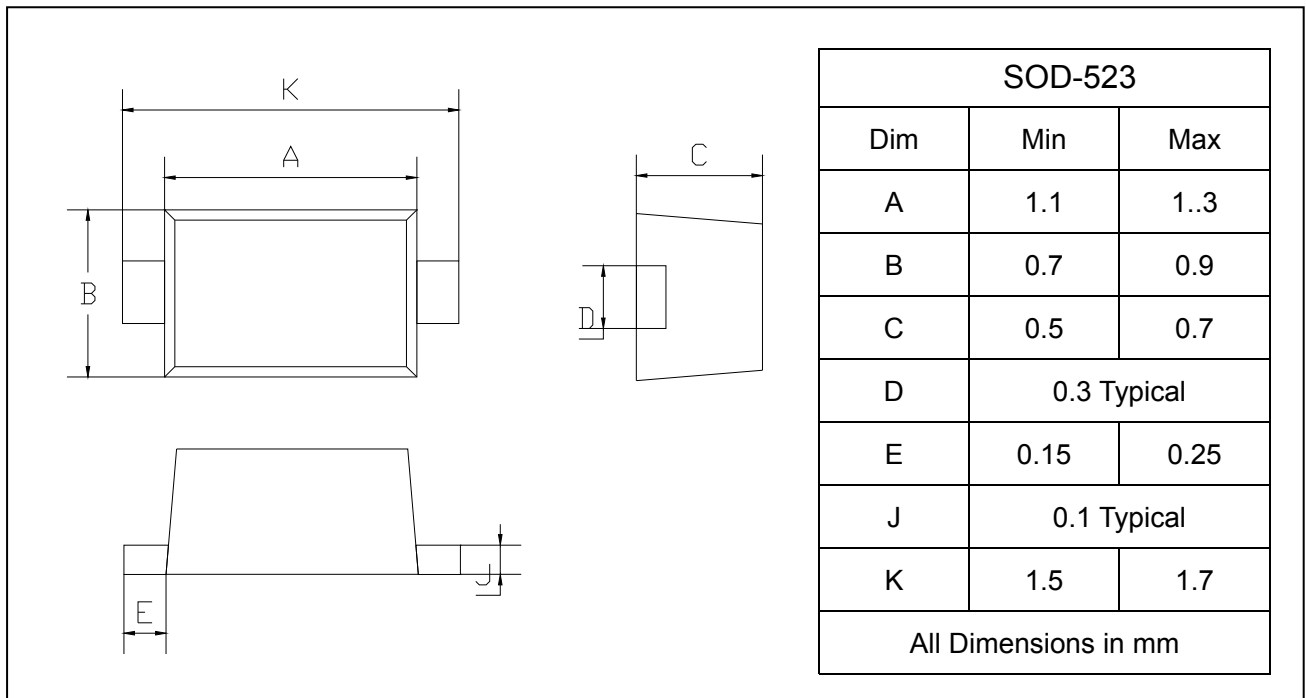
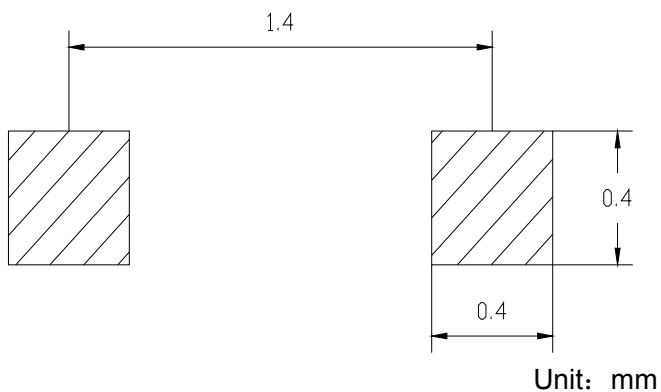


Fig.4 TYPICAL LEAKGE CURRENT

Zener Diode
BZX584C2V4-BZX584C51
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523


SOLDERING FOOTPRINT

PACKAGE INFORMATION

Device	Package	Shipping
BZX584CXX	SOD-523	3000/Tape&Reel