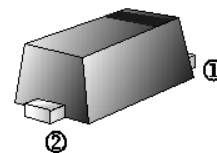


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Constant Voltage Control
- Standard Zener Breakdown Voltage Range 2.4V-68V
- Matte Tin (Sn) Lead Finish

SOD-523

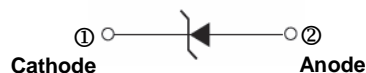


PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-523	8K	7 inch

ORDER INFORMATION

Part Number	Type
BZX584Bxxx-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Power Dissipation	P _D	150	mW
Operating Junction Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-55~150	

ELECTRICAL RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

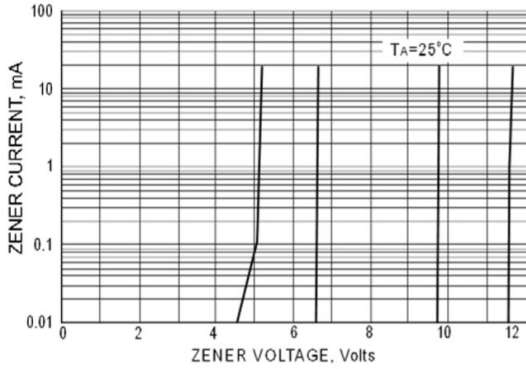
Part Number	Marking	Zener Voltage Range ¹				Maximum Zener Impedance			Maximum Reverse Current	
		V _Z @ I _{ZT}			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	V _R
		Min.	Nom.	Min.						
		V			mA	Ω	mA	μA	V	
BZX584B2V4-C	Z1.	2.35	2.4	2.45	5	100	600	1	50	1
BZX584B2V7-C	Z2.	2.65	2.7	2.75	5	100	600	1	20	1
BZX584B3V0-C	Z3.	2.94	3	3.06	5	95	600	1	10	1
BZX584B3V3-C	Z4.	3.23	3.3	3.37	5	95	600	1	5	1
BZX584B3V6-C	Z5.	3.53	3.6	3.67	5	90	600	1	5	1
BZX584B3V9-C	Z6.	3.82	3.9	3.98	5	90	600	1	3	1
BZX584B4V3-C	Z7.	4.21	4.3	4.39	5	90	600	1	3	1
BZX584B4V7-C	X1.	4.61	4.7	4.79	5	80	500	1	3	2
BZX584B5V1-C	2Z2	5	5.1	5.2	5	60	480	1	2	2
BZX584B5V6-C	2Z3	5.49	5.6	5.71	5	40	400	1	1	2
BZX584B6V2-C	2Z4	6.08	6.2	6.32	5	10	150	1	3	4
BZX584B6V8-C	2Z5	6.66	6.8	6.94	5	15	80	1	2	4
BZX584B7V5-C	2Z6	7.35	7.5	7.65	5	15	80	1	1	5
BZX584B8V2-C	2Z7	8.04	8.2	8.36	5	15	80	1	0.7	5
BZX584B9V1-C	2Z8	8.92	9.1	9.28	5	15	100	1	0.5	6
BZX584B10V-C	2Z9	9.8	10	10.2	5	20	150	1	0.2	7
BZX584B11V-C	2Y1	10.78	11	11.22	5	20	150	1	0.1	8
BZX584B12V-C	2Y2	11.76	12	12.24	5	25	150	1	0.1	8
BZX584B13V-C	2Y3	12.74	13	13.26	5	30	170	1	0.1	8
BZX584B14V-C	2Y8	13.72	14	14.28	5	30	110	1	0.1	10.5
BZX584B15V-C	2Y4	14.7	15	15.3	5	30	200	1	0.1	10.5
BZX584B16V-C	2Y5	15.68	16	16.32	5	40	200	1	0.1	11.2
BZX584B18V-C	2Y6	17.64	18	18.36	5	45	225	1	0.1	12.6
BZX584B20V-C	2Y7	19.6	20	20.4	5	55	225	1	0.1	14
BZX584B22V-C	W8.	21.56	22	22.44	5	55	250	1	0.1	15.4
BZX584B24V-C	W9.	23.52	24	24.48	5	70	250	1	0.1	16.8
BZX584B27V-C	Y1.	26.46	27	27.54	2	80	300	0.5	0.1	18.9
BZX584B30V-C	Y2.	29.40	30	30.6	2	80	300	0.5	0.1	21
BZX584B33V-C	Y3.	32.34	33	33.66	2	80	325	0.5	0.1	23.1
BZX584B36V-C	Y4.	35.28	36	36.72	2	90	350	0.5	0.1	25.2
BZX584B39V-C	Y5.	38.22	39	39.78	2	130	350	0.5	0.1	27.3
BZX584B43V-C	Y6.	42.14	43	43.86	2	130	350	0.5	0.1	29.4
BZX584B47V-C	V1.	45.83	47	48.17	2	170	1000	0.25	0.1	36
BZX584B51V-C	V2.	49.73	51	52.27	2	180	1300	0.25	0.1	39
BZX584B56V-C	V3.	54.6	56	57.4	2	200	1400	0.25	0.1	43
BZX584B62V-C	V4.	60.45	62	63.55	2	225	1400	0.25	0.1	47
BZX584B68V-C	V5.	66.3	68	69.7	2	240	1600	0.25	0.1	52

Note:

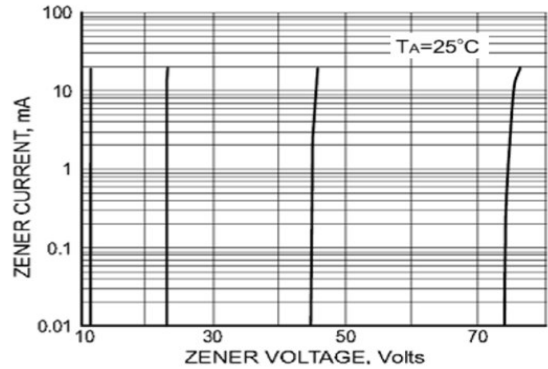
1. Pulse width=10ms, V_F Forward Voltage=900mV Maximum @ I_F=10mA for all types.

CHARACTERISTIC CURVES

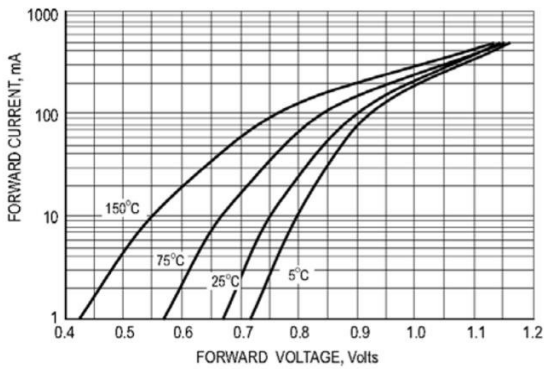
ZENER BREAKDOWN CHARACTERISTIC



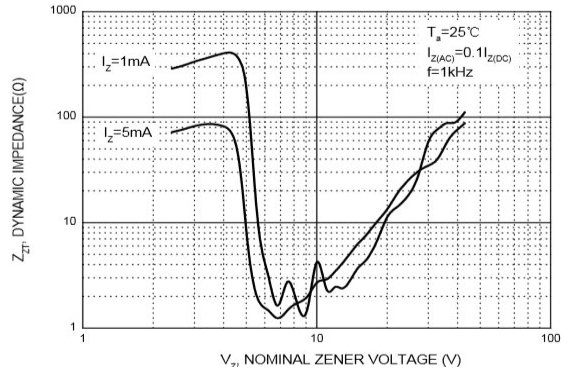
ZENER BREAKDOWN CHARACTERISTIC



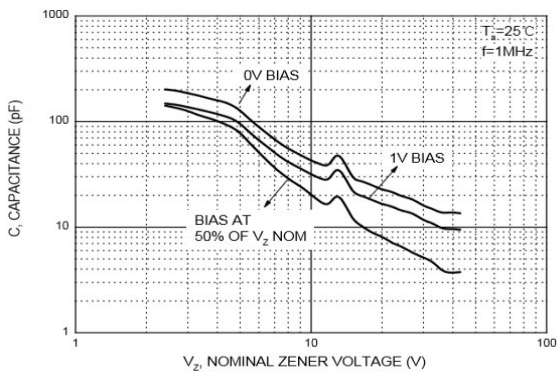
TYPICAL FORWARD VOLTAGE



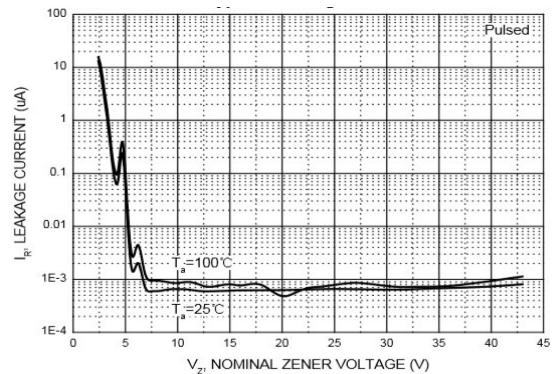
EFFECT OF ZENER VOLTAGE ON ZENER



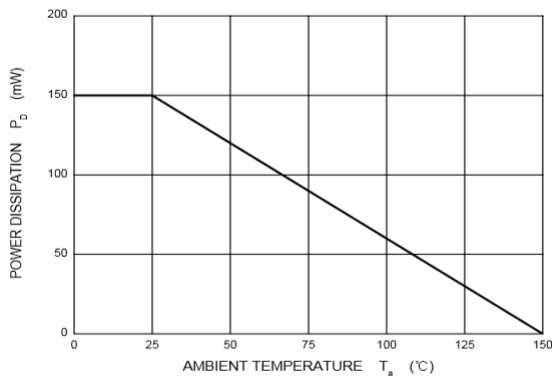
TYPICAL CAPACITANCE



TYPICAL LEAKAGE CURRENT

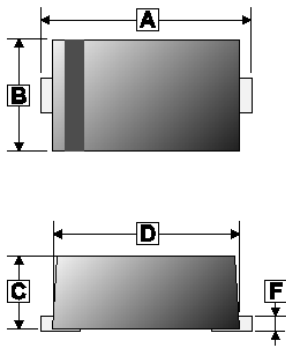


POWER DERATING CURVE



PACKAGE OUTLINE DIMENSIONS

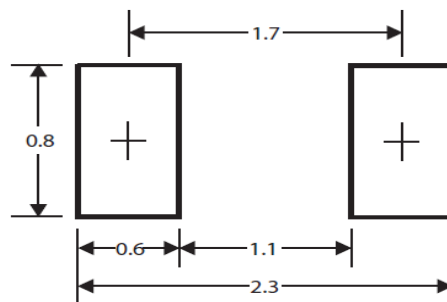
SOD-523



REF.	Millimeter	
	Min.	Max.
A	1.50	1.70
B	0.70	0.90
C	0.50	0.77
D	1.10	1.30
E	0.25	0.40
F	0.05	0.20

MOUNTING PAD LAYOUT

SOD-523



*Dimensions in millimeters