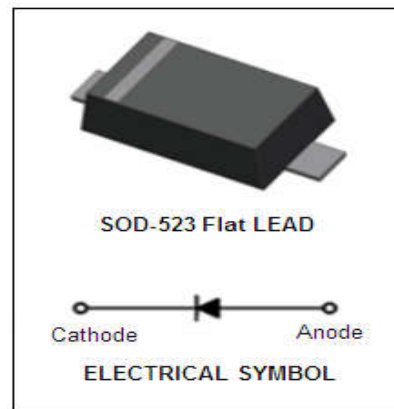


SOD-523 Plastic-Encapsulate Diode

Features:

- ◆ Planar die construction;
- ◆ 150mW power dissipation;
- ◆ Zener Voltage from 2.4V~39V;
- ◆ Ultra-Small Surface Mount



Maximum ratings($T_a=25^{\circ}\text{C}$ unless otherwise specified)

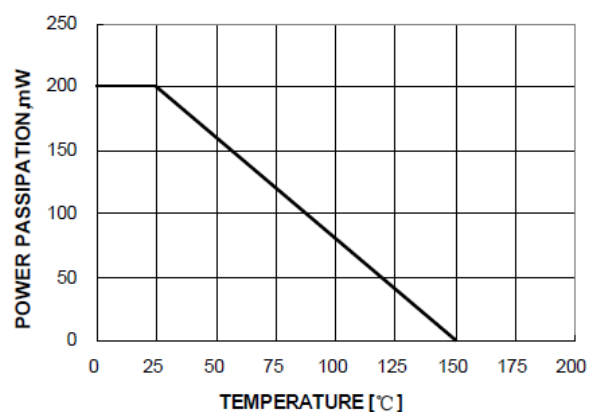
Characteristic	Symbol	Value	Unit
Forward Voltage (Note 2) @ $I_F=10\text{mA}$	V_{FM}	0.9	V
Power Dissipation (Note 1)	P_D	0.15	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-65~150	$^{\circ}\text{C}$

SOD-523 Plastic-Encapsulate Diode

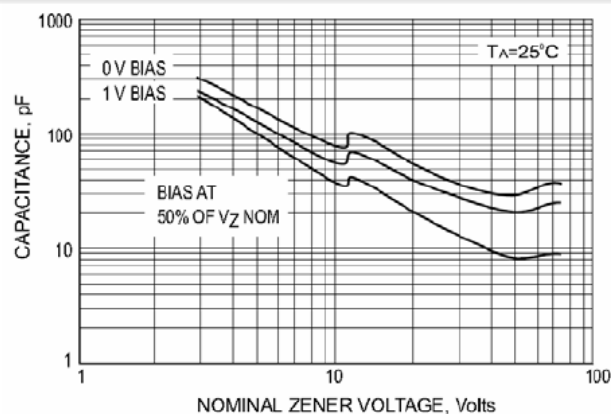
Electrical characteristics (Ta=25°C unless otherwise specified)

TYPE	Marking	Zener Voltage range(note2)				Maximum Zener Impedance(Note 3)			Maximum Reverse Current (Note2)		Typical Temperature Coefficient @I _{ZTC} mV/°C	
		V _Z @I _{ZT}			I _{ZT}	V _Z @I _{ZT}	V _{ZK} @I _{ZK}	I _{ZK}	I _R	V _R		
		Nom (V)	Min (V)	Max (V)	(mA)	Ω		(mA)	μA	V	Min	Max
BZX584B2V4X	2V1	2.4	2.35	2.45	5	100	600	1.0	50	1.0	-3.5	0
BZX584B2V7X	2V2	2.7	2.65	2.75	5	100	600	1.0	20	1.0	-3.5	0
BZX584B3V0X	2V3	3.0	2.94	3.06	5	95	600	1.0	10	1.0	-3.5	0
BZX584B3V3X	2V4	3.3	3.23	3.37	5	95	600	1.0	5	1.0	-3.5	0
BZX584B3V6X	2V5	3.6	3.53	3.67	5	90	600	1.0	5	1.0	-3.5	0
BZX584B3V9X	2V6	3.9	3.82	3.98	5	90	600	1.0	3	1.0	-3.5	0
BZX584B4V3X	2V7	4.3	4.21	4.39	5	90	600	1.0	3	1.0	-3.5	0
BZX584B4V7X	2Z1	4.7	4.61	4.79	5	80	500	1.0	3	2.0	-3.5	0.2
BZX584B5V1X	2Z2	5.1	5.00	5.20	5	60	480	1.0	2	2.0	-2.7	1.2
BZX584B5V6X	2Z3	5.6	5.49	5.71	5	40	400	1.0	1	2.0	-2.0	2.5
BZX584B6V2X	2Z4	6.2	6.08	6.32	5	10	150	1.0	3	4.0	0.4	3.7
BZX584B6V8X	2Z5	6.8	6.66	6.94	5	15	80	1.0	2	4.0	1.2	4.5
BZX584B7V5X	2Z6	7.5	7.35	7.65	5	15	80	1.0	1	5.0	2.5	5.3
BZX584B8V2X	2Z7	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0	3.2	6.2
BZX584B9V1X	2Z8	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0	3.8	7.0
BZX584B10X	2Z9	10	9.80	10.20	5	20	150	1.0	0.2	7.0	4.5	8.0
BZX584B11X	2Y1	11	10.78	11.22	5	20	150	1.0	0.1	8.0	5.4	9.0
BZX584B12X	2Y2	12	11.76	12.24	5	25	150	1.0	0.1	8.0	6.0	10.0
BZX584B13X	2Y3	13	12.74	13.26	5	30	170	1.0	0.1	8.0	7.0	11.0
BZX584B15X	2Y4	15	14.70	15.30	5	30	200	1.0	0.1	10.5	9.2	13.0
BZX584B16X	2Y5	16	15.68	16.32	5	40	200	1.0	0.1	11.2	10.4	14.0
BZX584B18X	2Y6	18	17.64	18.36	5	45	225	1.0	0.1	12.6	12.4	16.0
BZX584B20X	2Y7	20	19.60	20.40	5	55	225	1.0	0.1	14.0	14.4	18.0
BZX584B22X	2Y8	22	21.56	22.44	5	55	250	1.0	0.1	15.4	16.4	20.0
BZX584B24X	2Y9	24	23.52	24.48	5	70	250	1.0	0.1	16.8	18.4	22.0
BZX584B27X	2X1	27	26.46	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3
BZX584B30X	2X2	30	29.40	30.60	2	80	300	0.5	0.1	21.0	24.4	29.4
BZX584B33X	2X3	33	32.34	33.66	2	80	325	0.5	0.1	23.1	27.4	33.4
BZX584B36X	2X4	36	35.28	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4
BZX584B39X	2X5	39	38.22	39.78	2	130	350	0.5	0.1	27.3	33.4	41.2

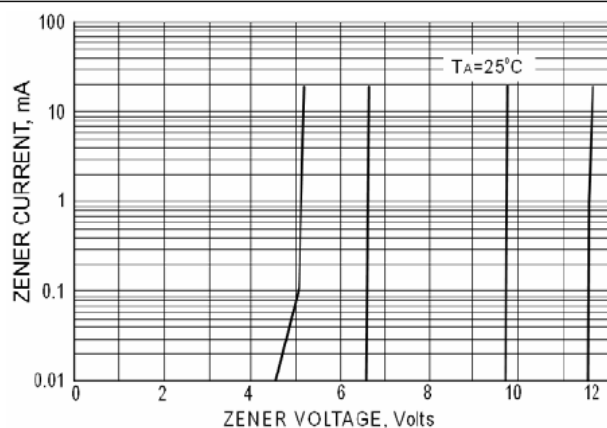
SOD-523 Plastic-Encapsulate Diode



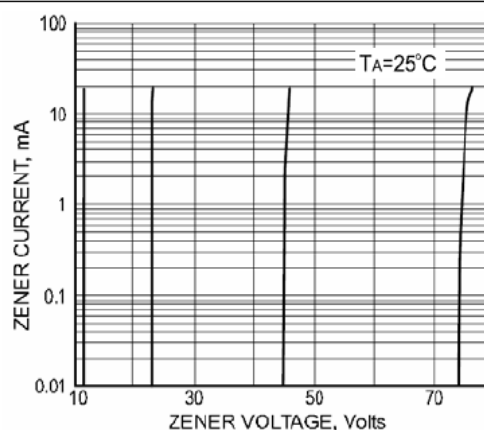
POWER DISSIPATION VS. AMBIENT TEMP.



TYPICAL CAPACITANCE



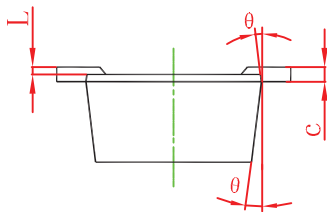
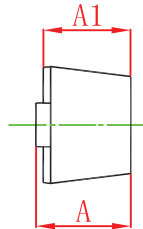
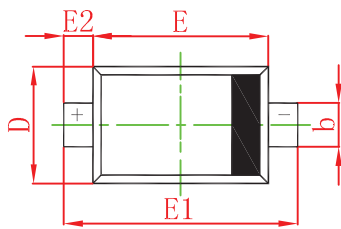
ZENER BREAKDOWN CHARACTERISTICS



ZENER BREAKDOWN CHARACTERISTICS

SOD-523 Plastic-Encapsulate Diode

Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	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
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

PACKAGE INFORMATION

Device	Package	Shipping
BZX584B2V4X-BZX584B39X	SOD-523	3000/Tape&Reel