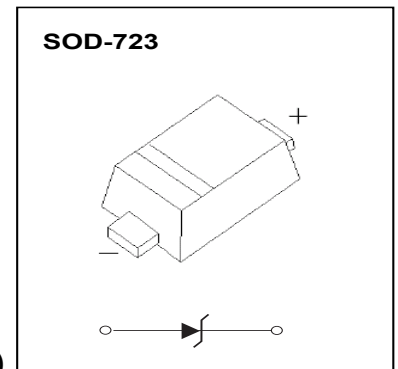


SOD-723 Plastic-Encapsulate Diodes**BZX784B2V4-BZX784B39**

Zener Diodes

**FEATURES**

- Zener Voltages From 2.4V - 39V
- 100mW Power Dissipation
- Planar Die Construction

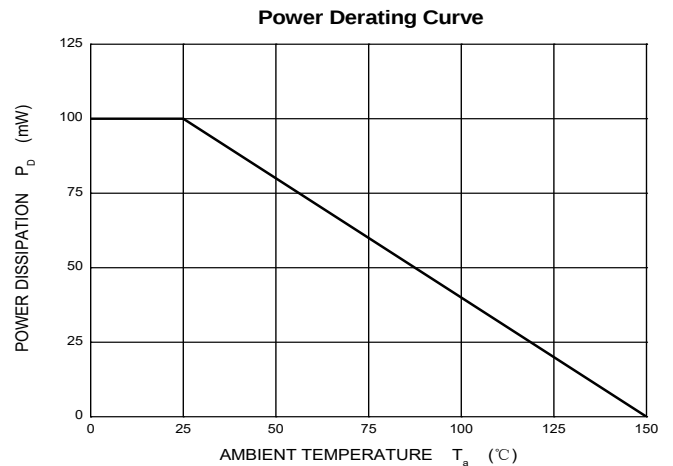
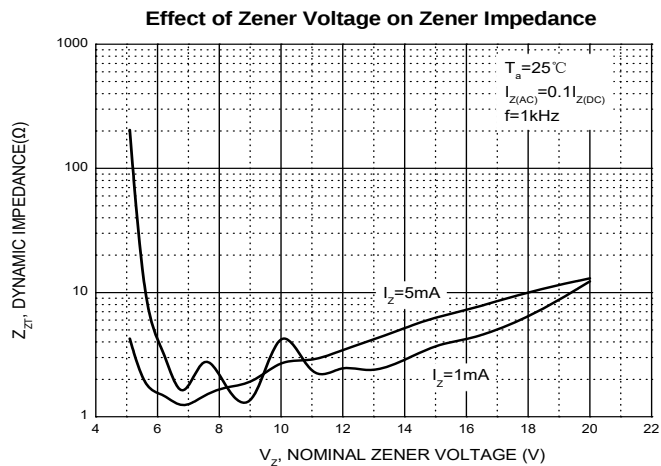
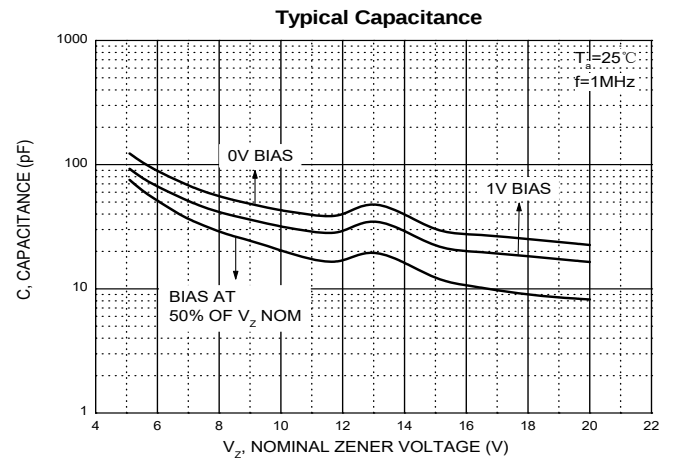
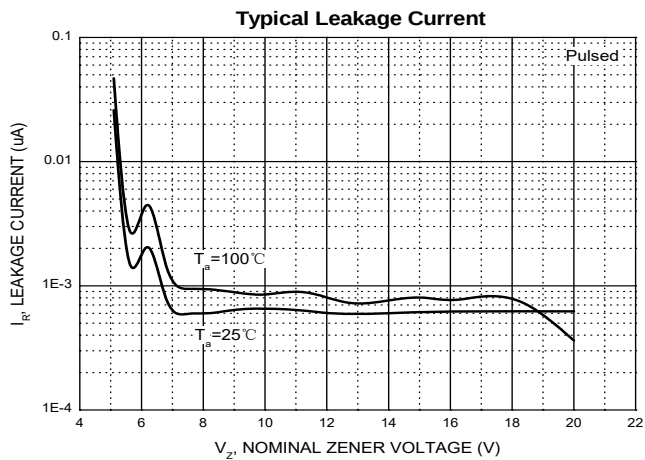
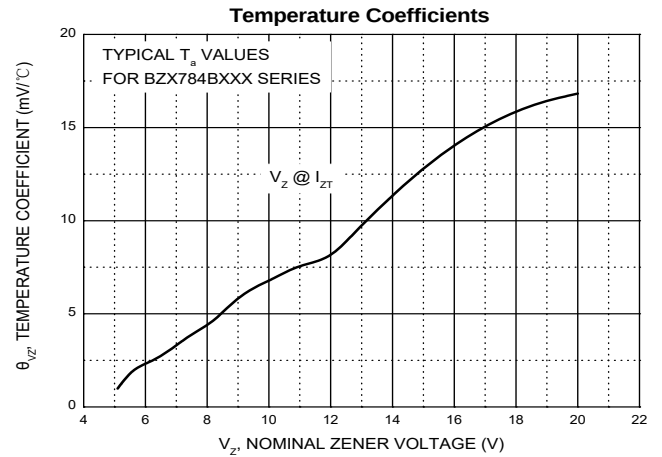
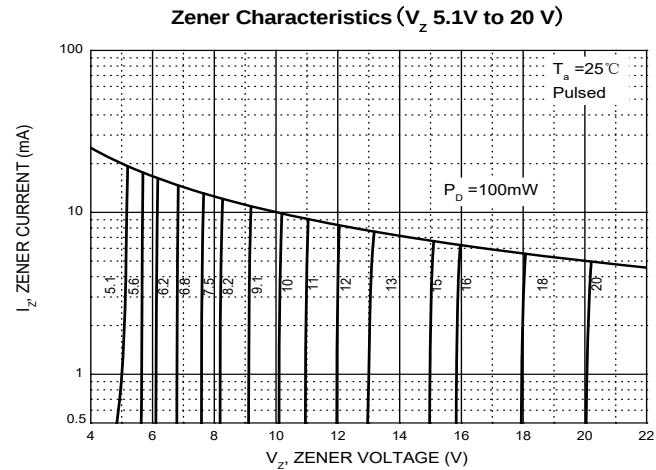
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F=10\text{mA}$	V_F	0.9	V
Power Dissipation (Note 1)	P_d	100	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	1250	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55 ~ +150	

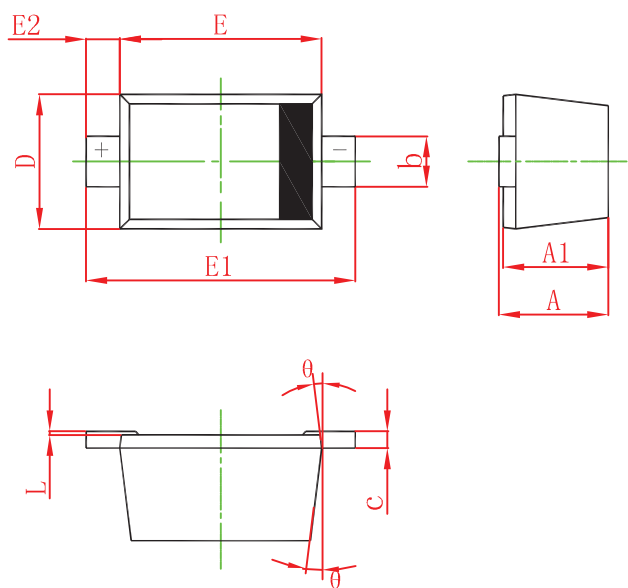
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Type Number	Type Code	Zener Voltage Range				Maximum Zener Impedance			Maximum Reverse Current		Typical Temperature Coefficient @ $I_Z=5\text{mA}$ $\text{mV}/^{\circ}\text{C}$	
		$V_Z@I_{ZT}$			I_{ZT}	$Z_{ZT}@I_{ZT}$	$Z_{ZK}@I_{ZK}$	I_{ZK}	I_R	V_R	Min	Max
		Nom(V)	Min(V)	Max(V)	mA	Ω	mA	μA	V			
BZX784B2V4	Z1	2.4	2.35	2.45	5	100	600	1.0	50	1.0	-3.5	0
BZX784B2V7	Z2	2.7	2.65	2.75	5	100	600	1.0	20	1.0	-3.5	0
BZX784B3V0	Z3	3	2.94	3.06	5	95	600	1.0	10	1.0	-3.5	0
BZX784B3V3	Z4	3.3	3.23	3.37	5	95	600	1.0	5	1.0	-3.5	0
BZX784B3V6	Z5	3.6	3.53	3.67	5	90	600	1.0	5	1.0	-3.5	0
BZX784B3V9	Z6	3.9	3.82	3.98	5	90	600	1.0	3	1.0	-3.5	0
BZX784B4V3	Z7	4.3	4.21	4.39	5	90	600	1.0	3	1.0	-3.5	0
BZX784B4V7	X1	4.7	4.61	4.79	5	80	500	1.0	3	2.0	-3.5	0.2
BZX784B5V1	X2	5.1	5.00	5.20	5	60	480	1.0	2	2.0	-2.7	1.2
BZX784B5V6	X3	5.6	5.49	5.71	5	40	400	1.0	1	2.0	-2.0	2.5
BZX784B6V2	X4	6.2	6.08	6.32	5	10	150	1.0	3	4.0	0.4	3.7
BZX784B6V8	X5	6.8	6.66	6.94	5	15	80	1.0	2	4.0	1.2	4.5
BZX784B7V5	X6	7.5	7.35	7.65	5	15	80	1.0	1	5.0	2.5	5.3
BZX784B8V2	X7	8.2	8.04	8.36	5	15	80	1.0	0.7	5.0	3.2	6.2
BZX784B9V1	X8	9.1	8.92	9.28	5	15	100	1.0	0.5	6.0	3.8	7.0
BZX784B10	X9	10	9.80	10.20	5	20	150	1.0	0.2	7.0	4.5	8.0
BZX784B11	W1	11	10.78	11.22	5	20	150	1.0	0.1	8.0	5.4	9.0
BZX784B12	W2	12	11.76	12.24	5	25	150	1.0	0.1	8.0	6.0	10.0
BZX784B13	W3	13	12.74	13.26	5	30	170	1.0	0.1	8.0	7.0	11.0
BZX784B15	W4	15	14.70	15.30	5	30	200	1.0	0.1	10.5	9.2	13.0
BZX784B16	W5	16	15.68	16.32	5	40	200	1.0	0.1	11.2	10.4	14.0
BZX784B18	W6	18	17.64	18.36	5	45	225	1.0	0.1	12.6	12.4	16.0
BZX784B20	W7	20	19.60	20.40	5	55	225	1.0	0.1	14.0	14.4	18.0
BZX784B22	W8	22	21.56	22.44	5	55	250	1.0	0.1	15.4	16.4	20.0
BZX784B24	W9	24	23.52	24.48	5	70	250	1.0	0.1	16.8	18.4	22.0
BZX784B27	Y1	27	26.46	27.54	2	80	300	0.5	0.1	18.9	21.4	25.3
BZX784B30	Y2	30	29.40	30.60	2	80	300	0.5	0.1	21.0	24.4	29.4
BZX784B33	Y3	33	32.34	33.66	2	80	325	0.5	0.1	23.1	27.4	33.4
BZX784B36	Y4	36	35.28	36.72	2	90	350	0.5	0.1	25.2	30.4	37.4
BZX784B39	Y5	39	38.22	39.78	2	130	350	0.5	0.1	27.3	33.4	41.2

Typical Characteristics

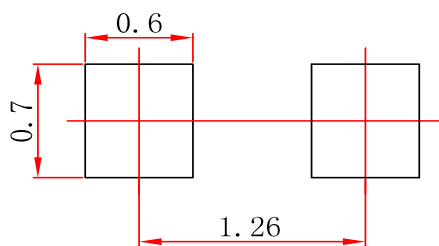


Package Outline Dimensions (SOD-723)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

Suggested Pad Layout (SOD-723)



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