

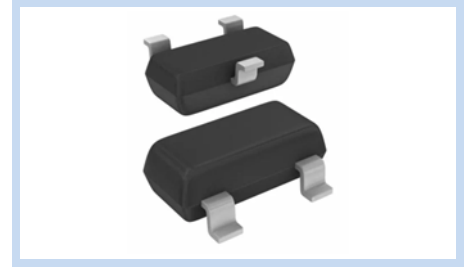
Zener Diodes SOT-23, AEC-Q101

BZX84B-A

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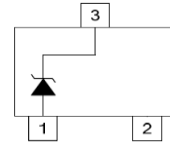
FEATURE

- Zener Voltage Range: 2.4V to 75V
- Zener Voltage Tolerance: $\pm 2\%$
- Power Dissipation: 410mW
- Planar Die Construction in a Small Plastic
- Ideally Suited for Automated Assembly Processes
- AEC-Q101 Qualified



MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026



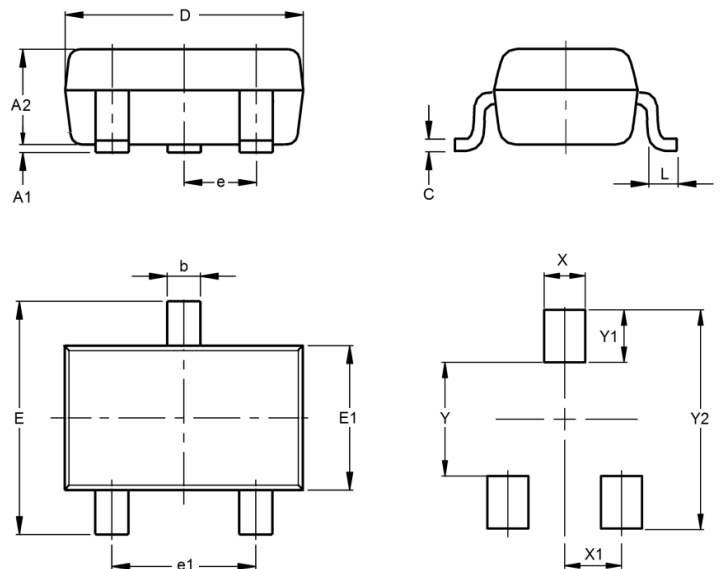
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
Power Dissipation	P_D	410	mW
Junction Temperature	T_J	-55~+150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Note: $T_A = 25^{\circ}\text{C}$ unless otherwise noted

DIMENSIONS AND RECOMMENDED LAND PATTERN

Item	Min (mm)	Max (mm)
A1	0.00	0.10
A2	0.90	1.10
b	0.35	0.50
C	0.08	0.2
D	2.80	3.04
e	0.90	1.00
e1	1.80	2.00
E	2.20	2.60
E1	1.20	1.40
L	0.15	--
X	0.80	0.80
X1	0.95	0.95
Y	1.10	1.10
Y1	0.90	0.90
Y2	2.90	2.90



Zener Diodes

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ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage V_Z at I_{ZT}			Max Zener Impedance Z_{ZT} at I_{ZT} , Z_{ZK} at $I_{ZK}=1mA$			Reverse Leakage Current I_R at V_R	
	Nom	Min	Max	Z_{ZT}	I_{ZT}	Z_{ZK}	I_R max	V_R
	(V)	(V)	(V)	(Ω)	(mA)	(Ω)	(μA)	(V)
BZX84B2V4-A	2.4	2.35	2.45	100	5.0	600	50	1.0
BZX84B2V7-A	2.7	2.64	2.75	100	5.0	600	20	1.0
BZX84B3V0-A	3.0	2.94	3.06	95	5.0	600	10	1.0
BZX84B3V3-A	3.3	3.23	3.37	95	5.0	600	5.0	1.0
BZX84B3V6-A	3.6	3.52	3.67	90	5.0	600	5.0	1.0
BZX84B3V9-A	3.9	3.82	3.98	90	5.0	600	3.0	1.0
BZX84B4V3-A	4.3	4.21	4.39	90	5.0	600	3.0	1.0
BZX84B4V7-A	4.7	4.61	4.79	80	5.0	500	3.0	2.0
BZX84B5V1-A	5.1	5.00	5.20	60	5.0	480	2.0	2.0
BZX84B5V6-A	5.6	5.49	5.71	40	5.0	400	1.0	2.0
BZX84B6V2-A	6.2	6.08	6.32	10	5.0	150	3.0	4.0
BZX84B6V8-A	6.8	6.66	6.94	15	5.0	80	2.0	4.0
BZX84B7V5-A	7.5	7.35	7.65	15	5.0	80	1.0	5.0
BZX84B8V2-A	8.2	8.04	8.36	15	5.0	80	0.7	5.0
BZX84B8V7-A	8.7	8.53	8.87	15	5.0	100	0.7	5.0
BZX84B9V1-A	9.1	8.92	9.28	15	5.0	100	0.5	6.0
BZX84B10-A	10	9.80	10.20	20	5.0	150	0.2	7.0
BZX84B11-A	11	10.78	11.22	20	5.0	150	0.1	8.0
BZX84B12-A	12	11.76	12.24	25	5.0	150	0.1	8.0
BZX84B13-A	13	12.74	13.26	30	5.0	170	0.1	8.0
BZX84B14-A	14	13.72	14.28	30	5.0	170	0.1	10.0
BZX84B15-A	15	14.70	15.30	30	5.0	200	0.1	10.5
BZX84B16-A	16	15.68	16.32	40	5.0	200	0.1	11.2
BZX84B17-A	17	16.66	17.34	40	5.0	200	0.1	12.2
BZX84B18-A	18	17.64	18.36	45	5.0	225	0.1	12.6
BZX84B20-A	20	19.60	20.40	55	5.0	225	0.1	14.0
BZX84B22-A	22	21.56	22.44	55	5.0	250	0.1	15.4
BZX84B24-A	24	23.52	24.48	70	5.0	250	0.1	16.8
BZX84B27-A	27	26.46	27.54	80	5.0	300	0.1	18.9
BZX84B28-A	28	27.44	28.56	80	5.0	300	0.1	20.5
BZX84B30-A	30	29.40	30.60	80	5.0	300	0.1	21.0
BZX84B33-A	33	32.34	33.66	80	5.0	325	0.1	23.1
BZX84B36-A	36	35.28	36.72	90	5.0	350	0.1	25.2
BZX84B39-A	39	38.22	39.78	130	5.0	350	0.1	27.3
BZX84B43-A	43	42.14	43.86	150	5.0	375	0.1	30.1
BZX84B47-A	47	46.06	47.94	170	5.0	375	0.1	32.9
BZX84B51-A	51	49.98	52.02	100	5.0	400	0.1	38.0
BZX84B56-A	56	54.88	57.12	135	2.5	1000	0.1	42.0
BZX84B62-A	62	60.76	63.24	150	2.5	1000	0.1	46.0
BZX84B68-A	68	66.64	69.36	200	2.5	1000	0.1	51.0
BZX84B75-A	75	73.50	76.50	250	2.5	1000	0.1	56.0

Note:

1. $T_A=25^{\circ}C$ unless otherwise noted
2. Mounted on 5.0mm² (0.013mm thick) land areas.

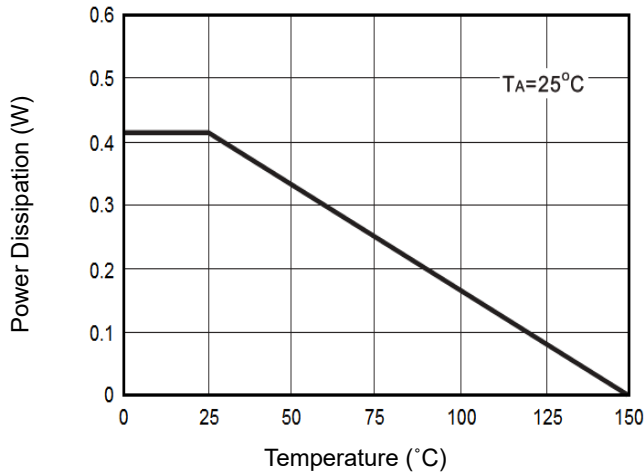
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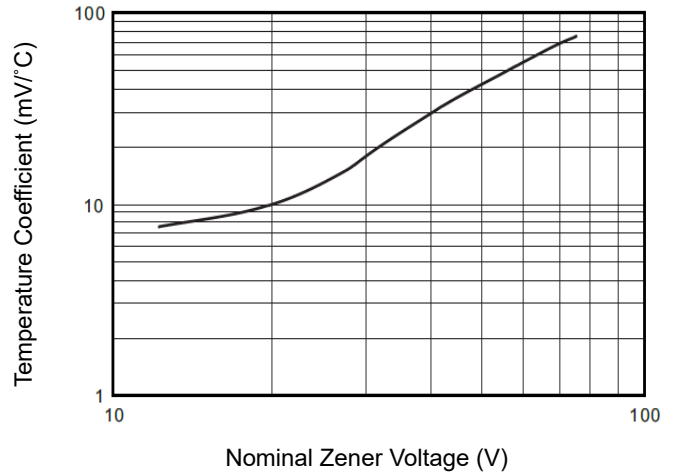
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CHARACTERISTIC CURVES

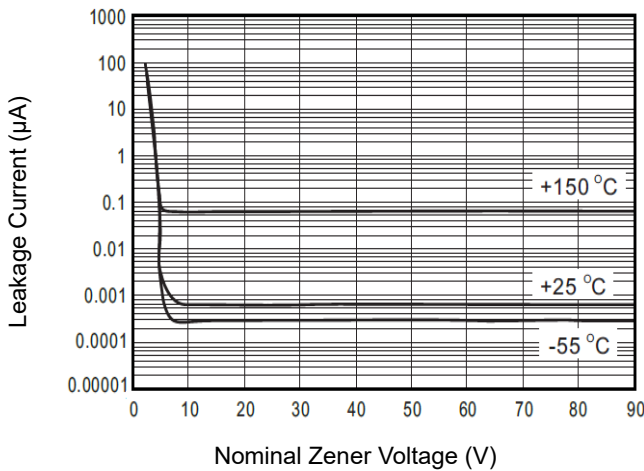
Steady-State Power Derating



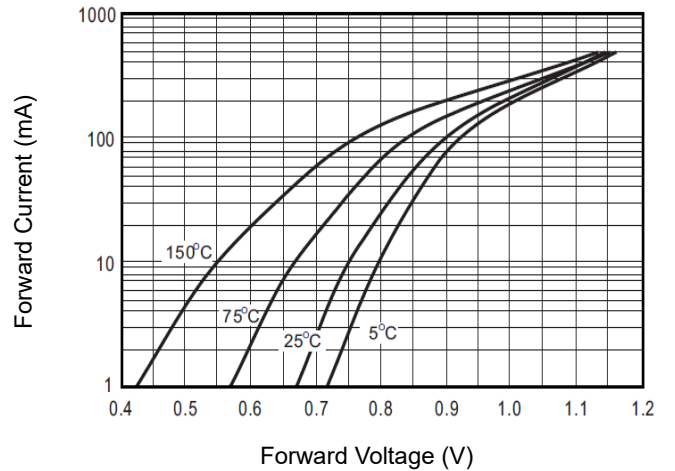
Temperature Coefficient



Typical Leakage Current



Typical Forward Voltage



*Specifications subject to change without notice.