



DESCRIPTION

The BZX84B2V4~BZX84B75 is available in SOT-23 package.

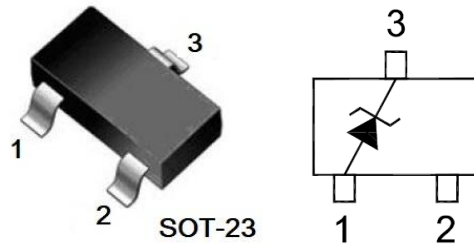
ORDERING INFORMATION

Package Type	Part Number	
SOT-23	BZX84B2V4	BZX84B15
	BZX84B2V7	BZX84B16
	BZX84B3V0	BZX84B18
	BZX84B3V3	BZX84B20
	BZX84B3V6	BZX84B22
	BZX84B3V9	BZX84B24
	BZX84B4V3	BZX84B27
	BZX84B4V7	BZX84B30
	BZX84B5V1	BZX84B33
	BZX84B5V6	BZX84B36
	BZX84B6V2	BZX84B39
	BZX84B6V8	BZX84B43
	BZX84B7V5	BZX84B47
	BZX84B8V2	BZX84B51
	BZX84B9V1	BZX84B56
	BZX84B10	BZX84B62
	BZX84B11	BZX84B68
	BZX84B12	BZX84B75
	BZX84B13	
Note	SPQ: 3,000pcs/Reel	
AiT provides all RoHS Compliant Products		

FEATURE

- Zener breakdown voltage range : 2.4V to 75V
- Package designed for optimal automated board assembly
- Small package size for high density applications

PIN DESCRIPTION



PIN#	DESCRIPTION
1	Anode
3	Cathode

ABSOLUTE MAXIMUM RATINGS

T_a = 25°C, unless otherwise specified

P _D , Power Dissipation	350mW
R _{θJA} , Typical resistance, junction to ambient *	417°C/W
T _{STG} , Storage Temperature Range	-65°C ~ + 150°C
T _J , Operating Temperature Range	-65°C ~ + 150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

*Alumina=0.4x0.3x0.024 in, 99.5% alumina.



ELECTRICAL CHARACTERISTICS

T_A = 25°C, unless otherwise specified

PART NUMBER	Zener Voltage Range				Dynamic Impedance		Reverse Current	
	V _Z @I _{ZT}			@I _{ZT}	Z _{YT}	@I _{ZT}	I _R	V _R
	No(V)	Min(V)	Max(V)	mA	Max. (Ω)	mA	Max. (μA)	V
BZX84B2V4	2.4	2.35	2.45	5	100	5	50	1
BZX84B2V7	2.7	2.65	2.75	5	100	5	20	1
BZX84B3V0	3	2.94	3.06	5	95	5	10	1
BZX84B3V3	3.3	3.23	3.37	5	95	5	5	1
BZX84B3V6	3.6	3.53	3.67	5	90	5	5	1
BZX84B3V9	3.9	3.82	3.98	5	90	5	3	1
BZX84B4V3	4.3	4.21	4.39	5	90	5	3	1
BZX84B4V7	4.7	4.61	4.79	5	80	5	3	2
BZX84B5V1	5.1	5	5.2	5	60	5	2	2
BZX84B5V6	5.6	5.49	5.71	5	40	5	1	2
BZX84B6V2	6.2	6.08	6.32	5	10	5	3	4
BZX84B6V8	6.8	6.66	6.94	5	15	5	2	4
BZX84B7V5	7.5	7.35	7.65	5	15	5	1	5
BZX84B8V2	8.2	8.04	8.36	5	15	5	0.7	5
BZX84B9V1	9.1	8.92	9.28	5	15	5	0.5	6
BZX84B10	10	9.8	10.2	5	20	5	0.2	7
BZX84B11	11	10.8	11.2	5	20	5	0.1	8
BZX84B12	12	11.8	12.2	5	25	5	0.1	8
BZX84B13	13	12.7	13.3	5	30	5	0.1	8
BZX84B15	15	14.7	15.3	5	30	5	0.05	10.5
BZX84B16	16	15.7	16.3	5	40	5	0.05	11.2
BZX84B18	18	17.6	18.4	5	45	5	0.05	12.6
BZX84B20	20	19.6	20.4	5	55	5	0.05	14
BZX84B22	22	21.6	22.4	5	55	5	0.05	15.4
BZX84B24	24	23.5	24.5	5	70	5	0.05	16.8
BZX84B27	27	26.5	27.5	2	80	2	0.05	18.9
BZX84B30	30	29.4	30.6	2	80	2	0.05	21
BZX84B33	33	32.3	33.7	2	80	2	0.05	23.1
BZX84B36	36	35.3	36.7	2	90	2	0.05	25.2
BZX84B39	39	38.2	39.8	2	130	2	0.05	27.3
BZX84B43	43	42.1	43.9	2	150	2	0.05	30.1
BZX84B47	47	46.1	47.9	2	170	2	0.05	32.9
BZX84B51	51	50	52	2	180	2	0.05	35.7
BZX84B56	56	54.9	57.1	2	200	2	0.05	39.2
BZX84B62	62	60.8	63.2	2	215	2	0.05	43.4
BZX84B68	68	66.6	69.4	2	240	2	0.05	47.6
BZX84B75	75	73.5	76.5	2	255	2	0.05	52.5



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Temperature Coefficient

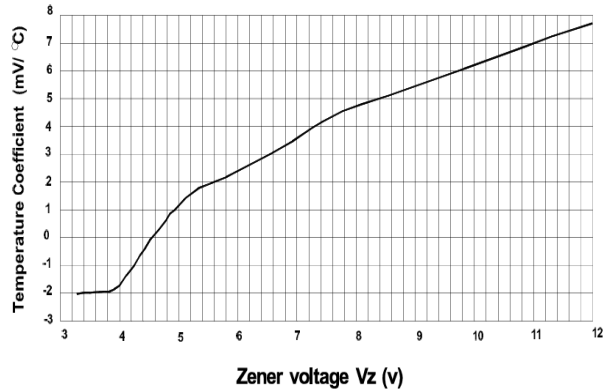


Fig 2. Temperature Coefficient

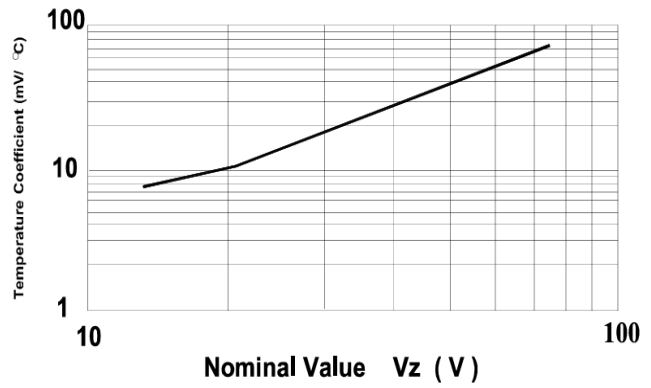


Fig 3. Power Derating Curve

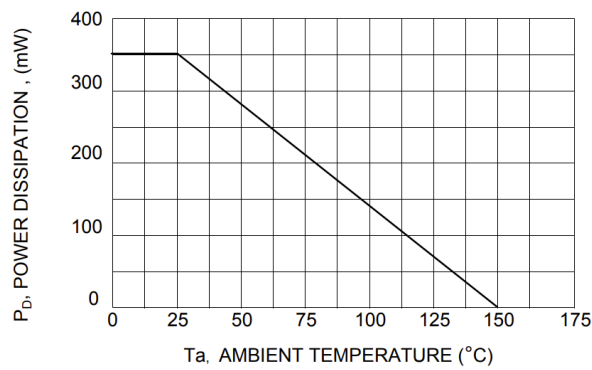
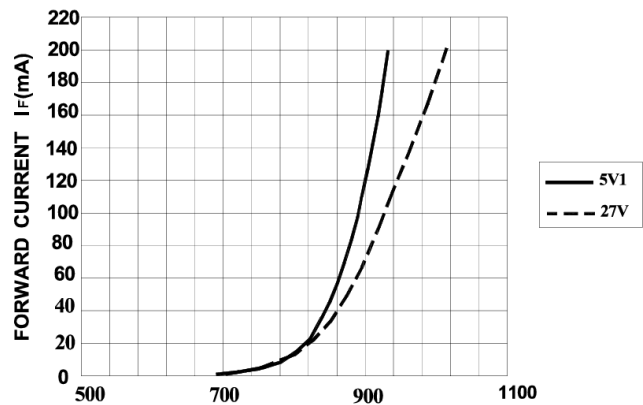


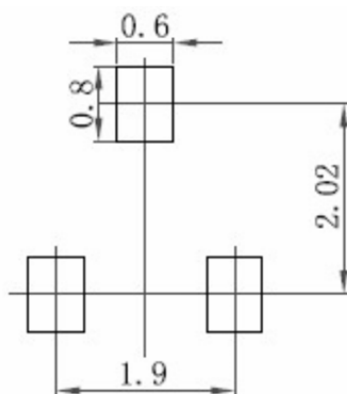
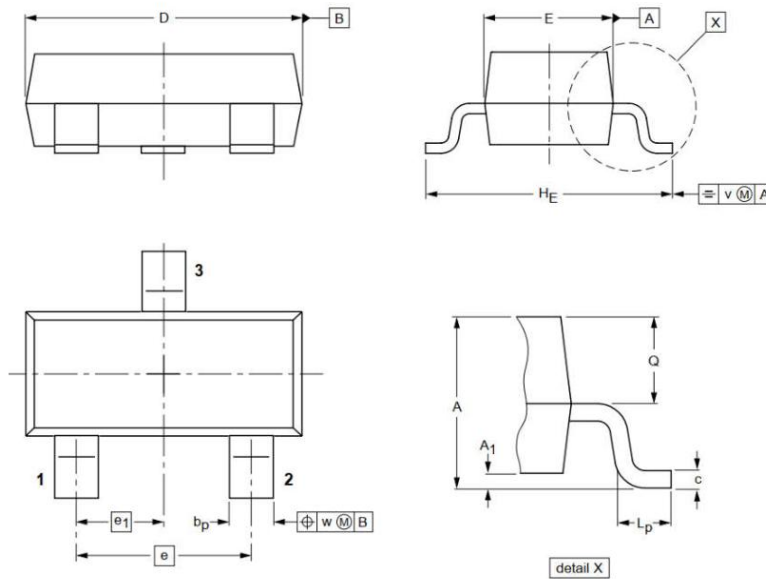
Fig 4. Typical Forward Voltage





PACKAGE INFORMATION

Dimension in SOT-23 Package



The recommended mounting pad size

SYMBOL	MIN	MAX
A	0.900	1.150
A1	0.100	
bp	0.380	0.480
C	0.090	0.150
D	2.800	3.000
E	1.200	1.400
E	1.900	
E1	0.950	
HE	2.100	2.550
Lp	0.150	0.450
Q	0.450	0.550
V	0.200	
W	0.100	



IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc. integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or server property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.