THE DATASHEET OF

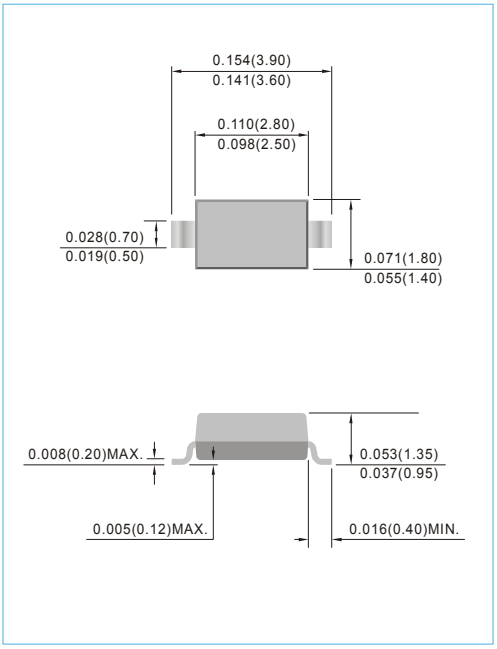
BZT52-B56_R1_00001

BZT52-B2V4~BZT52-B75

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 75 Volt **POWER** 410 mWatt

SOD-123 Unit : inch(mm)



FEATURES

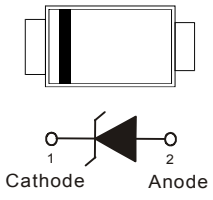
- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-123, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx. Weight: 0.0004 ounces, 0.01 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Parameter		Symbol	Value	Units
Maximum Power Dissipation (Note 1)		P_D	410	mW
Forward Voltage Drop at I_F=10mA		V_F	0.9	V
Thermal Resistance	Junction to Ambient (Note 2)	$R_{\theta JA}$	430	°C/W
	Junction to Lead	$R_{\theta JL}$	320	
Operating Junction Temperature and StorageTemperature Range		T_J	-55 to +150	°C



NOTES:

1. Mounted on 48 cm^2 FR-4 PCB .
2. Mounted on a FR-4 PCB, with minimum recommended Pad

PANJIT SEMI CONDUCTOR

BZT52-B2V4~BZT52-B75

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V_Z @ I_{ZT}			Z_{ZT} @ I_{ZT}		Z_{ZK} @ I_{ZK}		I_R @ V_R		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
410 mWatts Zener Diodes										
BZT52-B2V4	2.4	2.35	2.45	85	5.0	600	1.00	100	1.0	W1
BZT52-B2V7	2.7	2.64	2.75	83	5.0	600	1.00	75	1.0	W2
BZT52-B3	3.0	2.94	3.06	95	5.0	600	1.00	50	1.0	W3
BZT52-B3V3	3.3	3.23	3.37	95	5.0	600	1.00	25	1.0	W4
BZT52-B3V6	3.6	3.52	3.67	95	5.0	600	1.00	15	1.0	W5
BZT52-B3V9	3.9	3.82	3.98	95	5.0	600	1.00	10	1.0	W6
BZT52-B4V3	4.3	4.21	4.39	95	5.0	600	1.00	5.0	1.0	W7
BZT52-B4V7	4.7	4.61	4.79	78	5.0	500	1.00	5.0	1.0	W8
BZT52-B5V1	5.1	5.00	5.20	60	5.0	480	1.00	0.1	0.8	W9
BZT52-B5V6	5.6	5.49	5.71	40	5.0	400	1.00	0.1	1.0	WA
BZT52-B6V2	6.2	6.08	6.32	10	5.0	150	1.00	0.1	2.0	WB
BZT52-B6V8	6.8	6.66	6.94	8	5.0	80	1.00	0.1	3.0	WC
BZT52-B7V5	7.5	7.35	7.65	7	5.0	80	1.00	0.1	5.0	WD
BZT52-B8V2	8.2	8.04	8.36	7	5.0	80	1.00	0.1	6.0	WE
BZT52-B8V7	8.7	8.53	8.87	7	5.0	100	1.00	0.1	6.5	87C
BZT52-B9V1	9.1	8.92	9.28	10	5.0	100	1.00	0.1	7.0	WF
BZT52-B10	10	9.80	10.20	15	5.0	150	1.00	0.1	7.5	WG
BZT52-B11	11	10.78	11.22	20	5.0	150	1.00	0.1	8.5	WH
BZT52-B12	12	11.76	12.24	20	5.0	150	1.00	0.1	9.0	WI
BZT52-B13	13	12.74	13.26	25	5.0	170	1.00	0.1	10.0	WK
BZT52-B14	14	13.72	14.28	25	5.0	170	1.00	0.1	10.5	WJ
BZT52-B15	15	14.70	15.30	30	5.0	200	1.00	0.1	11.0	WL
BZT52-B16	16	15.68	16.32	40	5.0	200	1.00	0.1	12.0	WM
BZT52-B17	17	16.66	17.34	40	5.0	200	1.00	0.1	13.0	17C
BZT52-B18	18	17.64	18.36	50	5.0	225	1.00	0.1	14.0	WN
BZT52-B20	20	19.60	20.40	50	5.0	225	1.00	0.1	15.0	WO
BZT52-B22	22	21.56	22.44	55	5.0	250	1.00	0.1	17.0	WP
BZT52-B24	24	23.52	24.48	80	5.0	250	1.00	0.1	18.0	WR
BZT52-B27	27	26.46	27.54	80	5.0	300	1.00	0.1	20.0	WS
BZT52-B28	28	27.44	28.56	80	5.0	300	1.00	0.1	22.0	28C
BZT52-B30	30	29.40	30.60	80	5.0	300	1.00	0.1	22.5	WT
BZT52-B33	33	32.34	33.66	80	5.0	325	1.00	0.1	25.0	WU
BZT52-B36	36	35.28	36.72	90	5.0	350	1.00	0.1	27.0	WW
BZT52-B39	39	38.22	39.78	90	5.0	350	1.00	0.1	29.0	WX
BZT52-B43	43	42.14	43.86	100	5.0	375	1.00	0.1	32.0	WY
BZT52-B47	47	46.06	47.94	100	5.0	375	1.00	0.1	35.0	WZ
BZT52-B51	51	49.98	52.02	100	5.0	400	1.00	0.1	38.0	XA
BZT52-B56	56	54.88	57.12	135	2.5	1000	1.00	0.1	42.0	X2
BZT52-B62	62	60.76	63.24	150	2.5	1000	1.00	0.1	46.0	X3
BZT52-B68	68	66.64	69.36	200	2.5	1000	1.00	0.1	51.0	X4
BZT52-B75	75	73.50	76.50	250	2.5	1000	1.00	0.1	56.0	X5

BZT52-B2V4~BZT52-B75

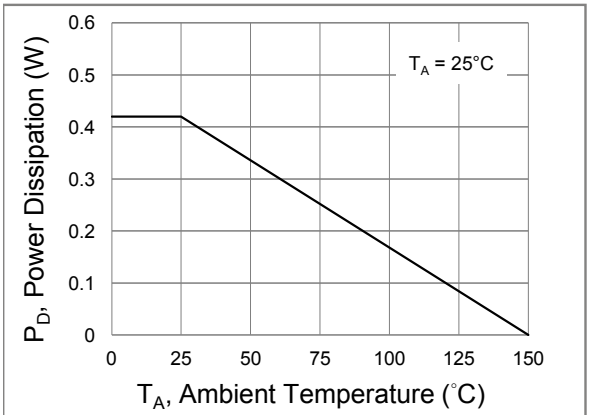


Fig.1 Power Derating Curve

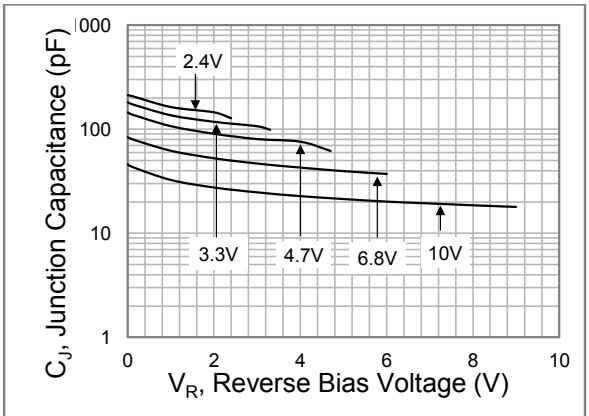


Fig.2 Typical Junction Capacitance

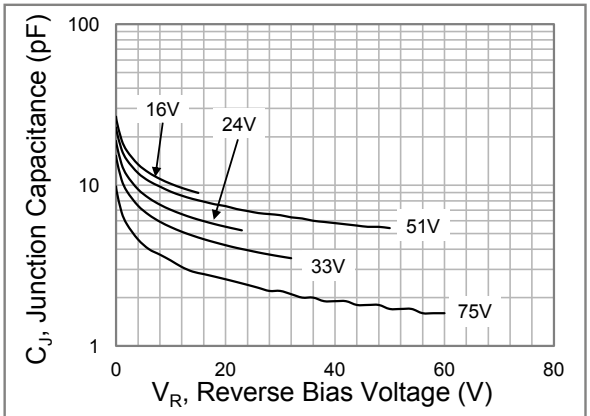


Fig.3 Typical Junction Capacitance

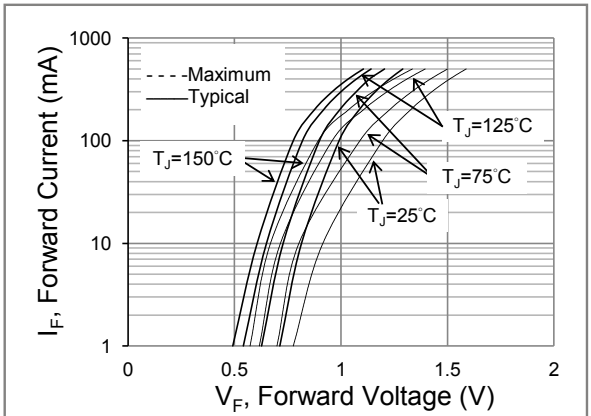


Fig.4 Typical Forward Characteristics

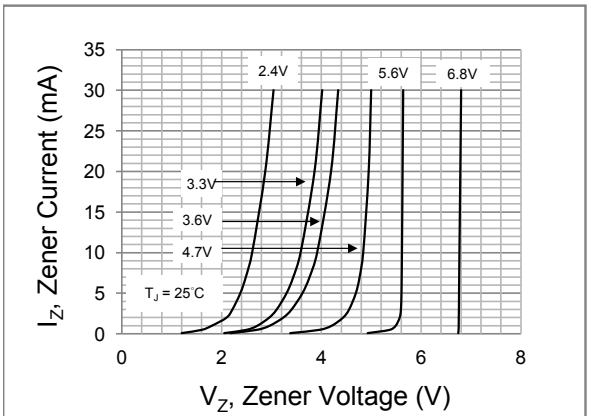


Fig.5 Typical Zener Characteristics

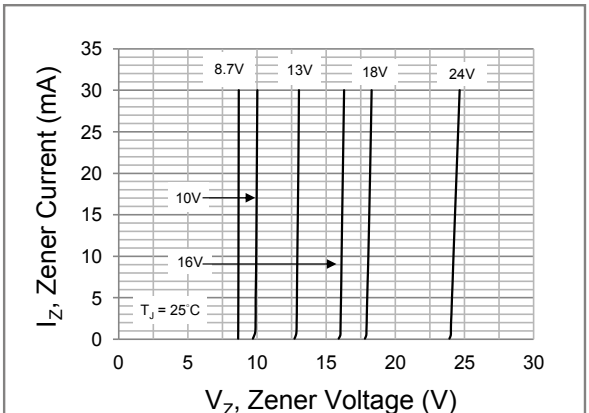


Fig.6 Typical Zener Characteristics

BZT52-B2V4~BZT52-B75

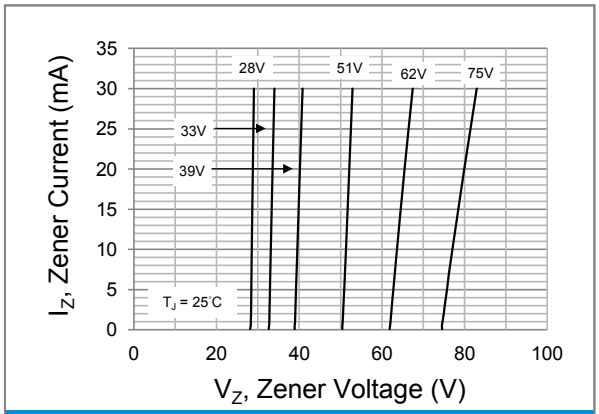


Fig.7 Typical Zener Characteristics

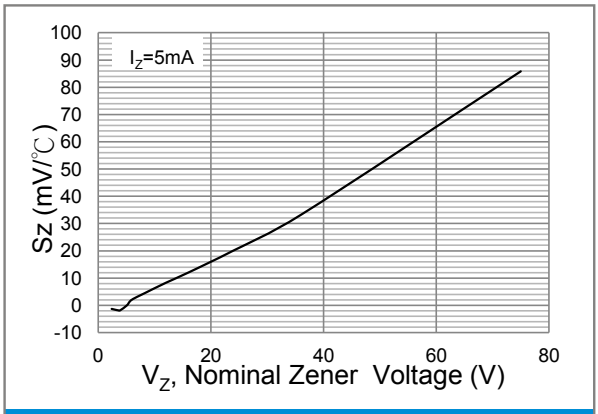
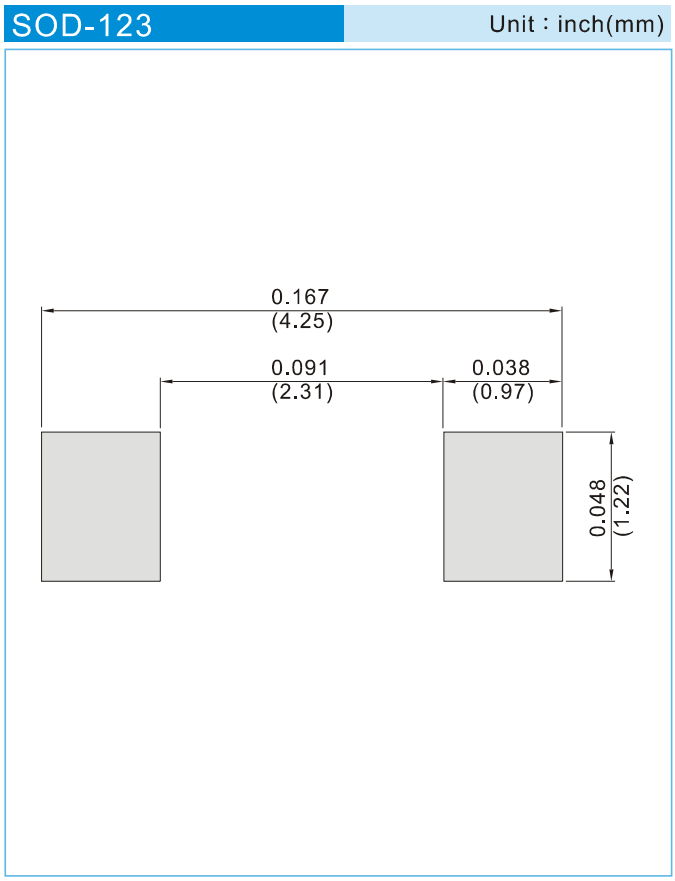


Fig.8 Temperature coefficient as a function of working current; typical values

BZT52-B2V4~BZT52-B75

MOUNTING PAD LAYOUT

SOD-123 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

BZT52-B2V4~BZT52-B75

Part No_packing code_Version

BZT52-B2V4_R1_00001

BZT52-B2V4_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

BZT52-B2V4~BZT52-B75

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View BZT52-B56_R1_00001 on WIN SOURCE
- Panjit Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management