

BZT52-C2V4~BZT52-C75

SURFACE MOUNT SILICON ZENER DIODES

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

SOD-123

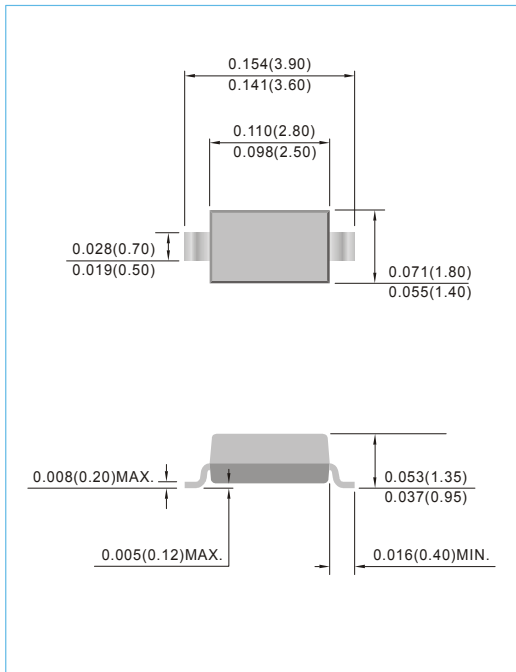
Unit : inch(mm)

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 RoHS 2.0
- Green molding compound as per IEC 61249 standard

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

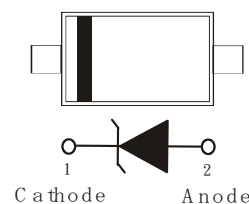


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Power Dissipation (Note A) at 25°C	P_D	410	mW
Typical Thermal Resistance	$R_{\theta JA}$	510	°C/W
Operating Junction Temperature and Storage Temperature Range	T_J	-55 to +150	°C

NOTES:

- Mounted on a FR-4 PCB, single-sided copper, with 100cm² copper pad area.
- Mounted on a FR-4 PCB, single-sided copper, mini pad.



BZT52-C2V4~BZT52-C75

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-C2V4	2.4	2.28	2.52	85	5.0	600	1.00	100	1.0	W1
BZT52-C2V7	2.7	2.57	2.84	83	5.0	600	1.00	75	1.0	W2
BZT52-C3	3.0	2.85	3.15	95	5.0	600	1.00	50	1.0	W3
BZT52-C3V3	3.3	3.14	3.47	95	5.0	600	1.00	25	1.0	W4
BZT52-C3V6	3.6	3.42	3.78	95	5.0	600	1.00	15	1.0	W5
BZT52-C3V9	3.9	3.71	4.10	95	5.0	600	1.00	10	1.0	W6
BZT52-C4V3	4.3	4.09	4.52	95	5.0	600	1.00	5.0	1.0	W7
BZT52-C4V7	4.7	4.47	4.94	78	5.0	500	1.00	5.0	1.0	W8
BZT52-C5V1	5.1	4.85	5.36	60	5.0	480	1.00	0.1	0.8	W9
BZT52-C5V6	5.6	5.32	5.88	40	5.0	400	1.00	0.1	1.0	WA
BZT52-C6V2	6.2	5.89	6.51	10	5.0	150	1.00	0.1	2.0	WB
BZT52-C6V8	6.8	6.46	7.14	8	5.0	80	1.00	0.1	3.0	WC
BZT52-C7V5	7.5	7.13	7.88	7	5.0	80	1.00	0.1	5.0	WD
BZT52-C8V2	8.2	7.79	8.61	7	5.0	80	1.00	0.1	6.0	WE
BZT52-C8V7	8.7	8.27	9.14	7	5.0	100	1.00	0.1	6.5	87C
BZT52-C9V1	9.1	8.65	9.56	10	5.0	100	1.00	0.1	7.0	WF
BZT52-C10	10	9.50	10.50	15	5.0	150	1.00	0.1	7.5	WG
BZT52-C11	11	10.45	11.55	20	5.0	150	1.00	0.1	8.5	WH
BZT52-C12	12	11.40	12.60	20	5.0	150	1.00	0.1	9.0	WI
BZT52-C13	13	12.35	13.65	25	5.0	170	1.00	0.1	10.0	WK
BZT52-C14	14	13.30	14.70	25	5.0	170	1.00	0.1	10.5	WJ
BZT52-C15	15	14.25	15.75	30	5.0	200	1.00	0.1	11.0	WL
BZT52-C16	16	15.20	16.80	40	5.0	200	1.00	0.1	12.0	WM
BZT52-C17	17	16.15	17.85	40	5.0	200	1.00	0.1	13.0	17C
BZT52-C18	18	17.10	18.90	50	5.0	225	1.00	0.1	14.0	WN
BZT52-C20	20	19.00	21.00	50	5.0	225	1.00	0.1	15.0	WO
BZT52-C22	22	20.90	23.10	55	5.0	250	1.00	0.1	17.0	WP
BZT52-C24	24	22.80	25.20	80	5.0	250	1.00	0.1	18.0	WR
BZT52-C27	27	25.65	28.35	80	5.0	300	1.00	0.1	20.0	WS
BZT52-C28	28	26.60	29.40	80	5.0	300	1.00	0.1	22.0	28C
BZT52-C30	30	28.50	31.50	80	5.0	300	1.00	0.1	22.5	WT
BZT52-C33	33	31.35	34.65	80	5.0	325	1.00	0.1	25.0	WU
BZT52-C36	36	34.20	37.80	90	5.0	350	1.00	0.1	27.0	WW
BZT52-C39	39	37.05	40.95	90	5.0	350	1.00	0.1	29.0	WX
BZT52-C43	43	40.85	45.15	100	5.0	375	1.00	0.1	32.0	WY
BZT52-C47	47	44.65	49.35	100	5.0	375	1.00	0.1	35.0	WZ
BZT52-C51	51	48.45	53.55	100	5.0	400	1.00	0.1	38.0	XA
BZT52-C56	56	53.20	58.80	135	2.5	1000	1.00	0.1	42.0	X2
BZT52-C62	62	58.90	65.10	150	2.5	1000	1.00	0.1	46.0	X3
BZT52-C68	68	64.60	71.40	200	2.5	1000	1.00	0.1	51.0	X4
BZT52-C75	75	71.25	78.75	250	2.5	1000	1.00	0.1	56.0	X5

BZT52-C2V4~BZT52-C75

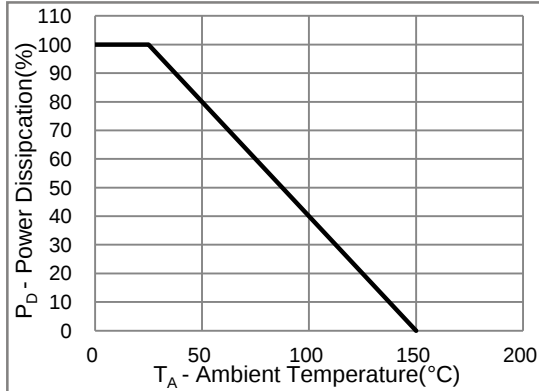


Fig.1 Power Derating Curve

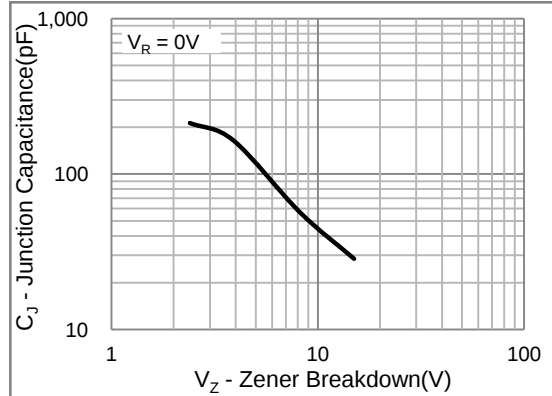


Fig.2 Typical Junction Capacitance

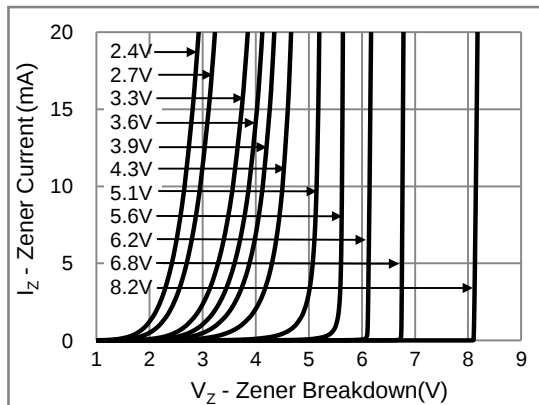


Fig.3 Typical Zener Breakdown

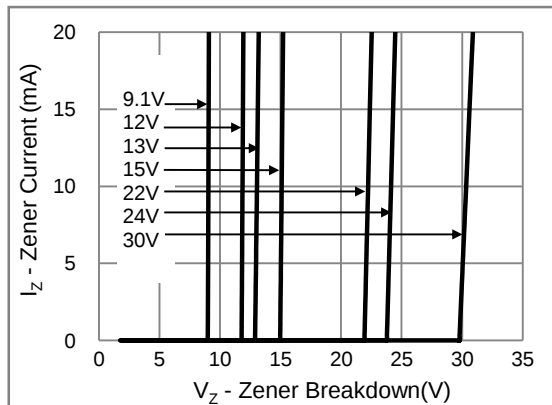


Fig.4 Typical Zener Breakdown

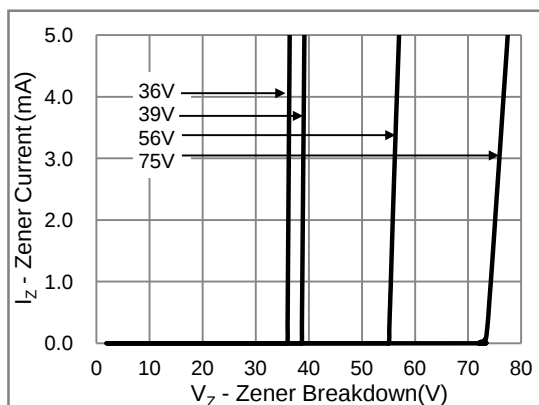


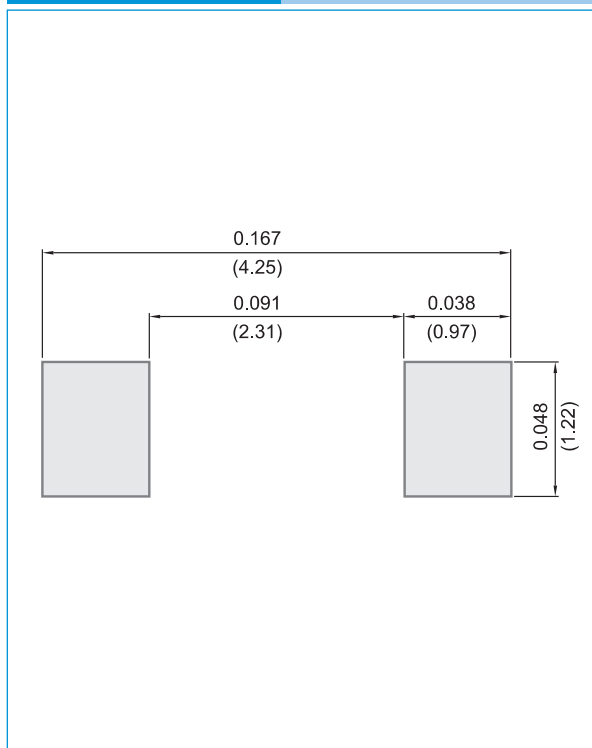
Fig.5 Typical Zener Breakdown

BZT52-C2V4~BZT52-C75

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-C2V4~BZT52-C75

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.