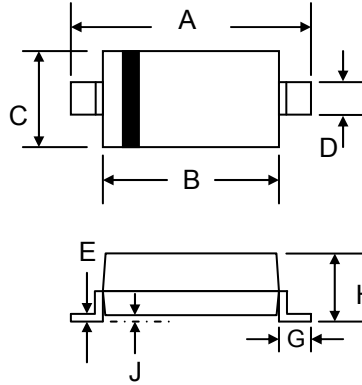


Features

- Planar Die Construction
- 200mW Power Dissipation
- 2.4V – 75V Nominal Zener Voltage
- 2% Standard Vz Tolerance
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-0



SOD-323		
Dim	Min	Max
A	2.30	2.75
B	1.60	1.80
C	1.15	1.35
D	0.25	0.40
E	0.09	0.18
G	0.20	0.40
H	0.80	1.00
J	—	0.12
All Dimensions in mm		

Mechanical Data

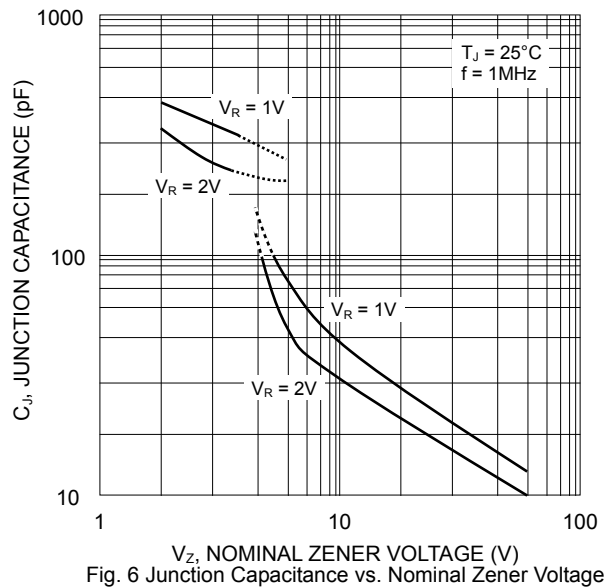
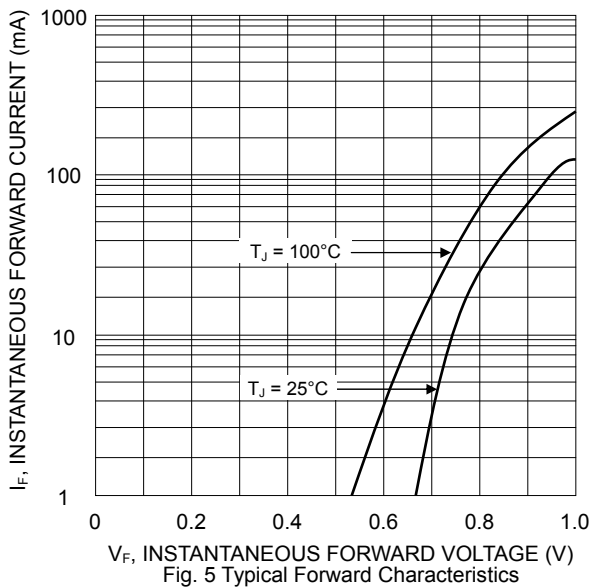
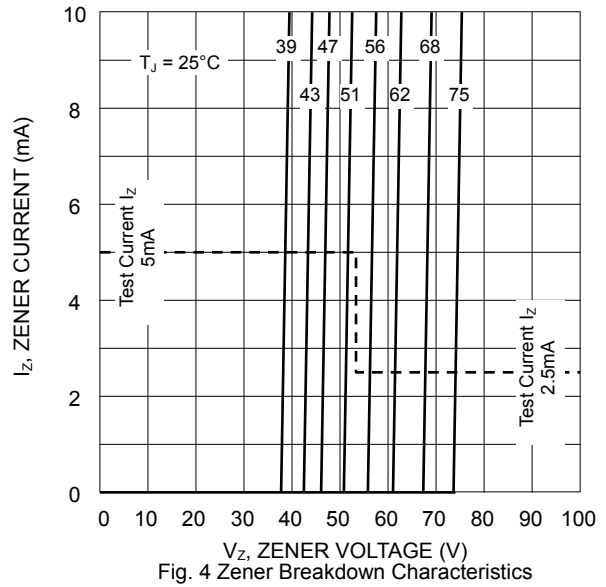
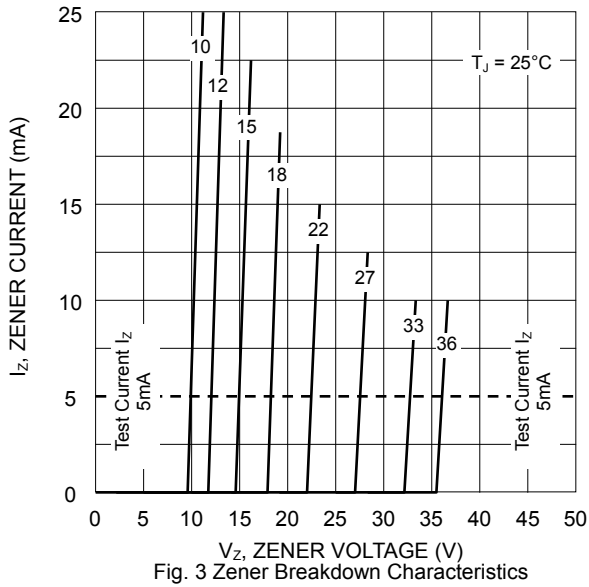
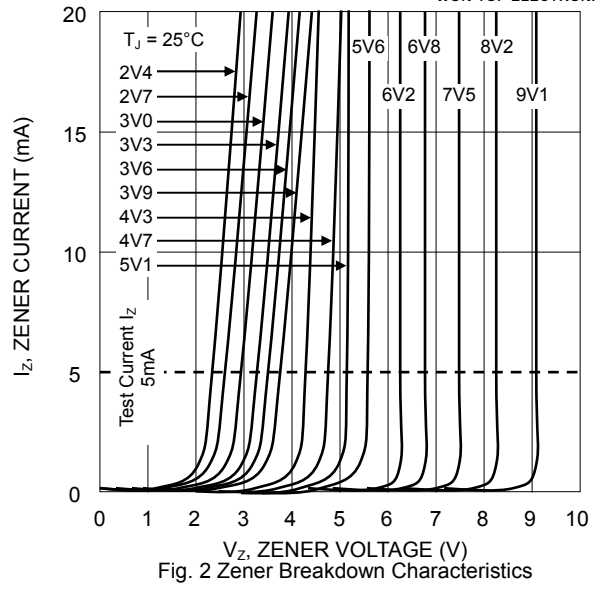
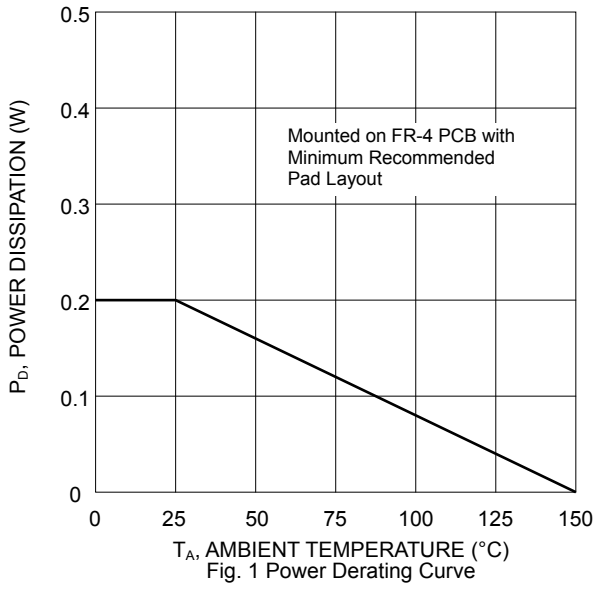
- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: Device Code
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 5**

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation at $T_A = 25^{\circ}\text{C}$ (Note 1)	P_D	200	mW
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Thermal Resistance, Junction to Ambient (Note 1, 2)	R_{JA}	625	$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}\text{C}$

Note: 1. Mounted on FR-4 PCB with minimum recommended pad layout.
2. Thermal resistance measurement obtained via infrared scan method.

BZT52B2V4S – BZT52B75S



Electrical Characteristics (@T_A=25°C unless otherwise specified) Table 1

Type Number (Note 1)	Device Marking Code (Note 2)		Zener Voltage Range (Note 3)			Maximum Zener Impedance (Note 4)				Max Reverse Leakage Current		Temp. Coefficient of Zener Voltage @ I _{ZT} (mV/°C)	
			V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R	@ V _R		
	TW	CN	Nom (V)	Min (V)	Max (V)	()	(mA)	()	(mA)	(μA)	(V)	Min	Max
BZT52B2V4S	W1	OZ	2.4	2.35	2.45	85	5.0	600	1.0	100	1.0	-9	-4
BZT52B2V7S	W2	1Z	2.7	2.65	2.75	83	5.0	500	1.0	75	1.0	-9	-4
BZT52B3V0S	W3	2Z	3.0	2.94	3.06	95	5.0	500	1.0	50	1.0	-9	-3
BZT52B3V3S	W4	3Z	3.3	3.23	3.37	95	5.0	500	1.0	25	1.0	-8	-3
BZT52B3V6S	W5	4Z	3.6	3.53	3.67	95	5.0	500	1.0	15	1.0	-8	-3
BZT52B3V9S	W6	5Z	3.9	3.82	3.98	95	5.0	500	1.0	10	1.0	-7	-3
BZT52B4V3S	W7	6Z	4.3	4.21	4.39	95	5.0	500	1.0	5.0	1.0	-6	-1
BZT52B4V7S	W8	7Z	4.7	4.61	4.79	78	5.0	500	1.0	5.0	1.0	-5	+2
BZT52B5V1S	W9	8Z	5.1	5.00	5.20	60	5.0	480	1.0	0.1	0.8	-3	+4
BZT52B5V6S	WA	9Z	5.6	5.49	5.71	40	5.0	400	1.0	0.1	1.0	-2	+6
BZT52B6V2S	WB	AZ	6.2	6.08	6.32	10	5.0	200	1.0	0.1	2.0	-1	+7
BZT52B6V8S	WC	BZ	6.8	6.66	6.94	8	5.0	150	1.0	0.1	3.0	+2	+7
BZT52B7V5S	WD	CZ	7.5	7.35	7.65	7	5.0	50	1.0	0.1	5.0	+3	+7
BZT52B8V2S	WE	DZ	8.2	8.04	8.36	7	5.0	50	1.0	0.1	6.0	+4	+7
BZT52B9V1S	WF	EZ	9.1	8.92	9.28	10	5.0	50	1.0	0.1	7.0	+5	+8
BZT52B10S	WG	FZ	10	9.80	10.20	15	5.0	70	1.0	0.1	7.5	+5	+8
BZT52B11S	WH	GZ	11	10.78	11.22	20	5.0	70	1.0	0.1	8.5	+5	+9
BZT52B12S	WI	HZ	12	11.76	12.24	20	5.0	90	1.0	0.1	9.0	+6	+9
BZT52B13S	WK	JZ	13	12.74	13.26	25	5.0	110	1.0	0.1	10	+7	+9
BZT52B15S	WL	KZ	15	14.70	15.30	30	5.0	110	1.0	0.1	11	+7	+9
BZT52B16S	WM	LZ	16	15.68	16.32	40	5.0	170	1.0	0.1	12	+8	+9.5
BZT52B18S	WN	MZ	18	17.64	18.36	50	5.0	170	1.0	0.1	14	+8	+9.5
BZT52B20S	WO	NZ	20	19.60	20.40	50	5.0	220	1.0	0.1	15	+8	+10
BZT52B22S	WP	PZ	22	21.56	22.44	55	5.0	220	1.0	0.1	17	+8	+10
BZT52B24S	WR	RZ	24	23.52	24.48	80	5.0	220	1.0	0.1	18	+8	+10
BZT52B27S	WS	SZ	27	26.46	27.54	80	5.0	250	1.0	0.1	20	+8	+10
BZT52B30S	WT	TZ	30	29.40	30.60	80	5.0	250	1.0	0.1	22.5	+8	+10
BZT52B33S	WU	UZ	33	32.34	33.66	80	5.0	250	1.0	0.1	25	+8	+10
BZT52B36S	WW	VZ	36	35.28	36.72	90	5.0	250	1.0	0.1	27	+8	+10
BZT52B39S	WX	WZ	39	38.22	39.78	90	5.0	300	1.0	0.1	29	+10	+12
BZT52B43S	WY	XZ	43	42.14	43.86	100	5.0	700	1.0	0.1	32	+10	+12
BZT52B47S	WZ	YZ	47	46.06	47.94	100	5.0	750	1.0	0.1	35	+10	+12
BZT52B51S	XA	-Z	51	49.98	52.02	100	5.0	750	1.0	0.1	38	+10	+12
BZT52B56S	X2	=Z	56	54.88	57.12	135	2.5	1000	0.5	0.1	42	+10	-
BZT52B62S	X3	≡Z	62	60.76	63.24	150	2.5	1000	0.5	0.1	46	+10	-
BZT52B68S	X4	>Z	68	66.64	69.36	200	2.5	1000	0.5	0.1	51	+10	-
BZT52B75S	X5	<Z	75	73.50	76.50	250	2.5	1500	0.5	0.1	56	+10	-

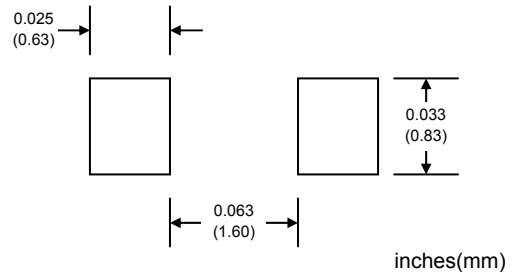
- Note: 1. Type numbers listed have standard tolerance on the nominal zener voltage of ±2%.
 2. TW: Marking code for Taiwan plant. CN: Marking code for China plant.
 3. Measured with pulses t_p = 5ms.
 4. f = 1KHz

MARKING INFORMATION



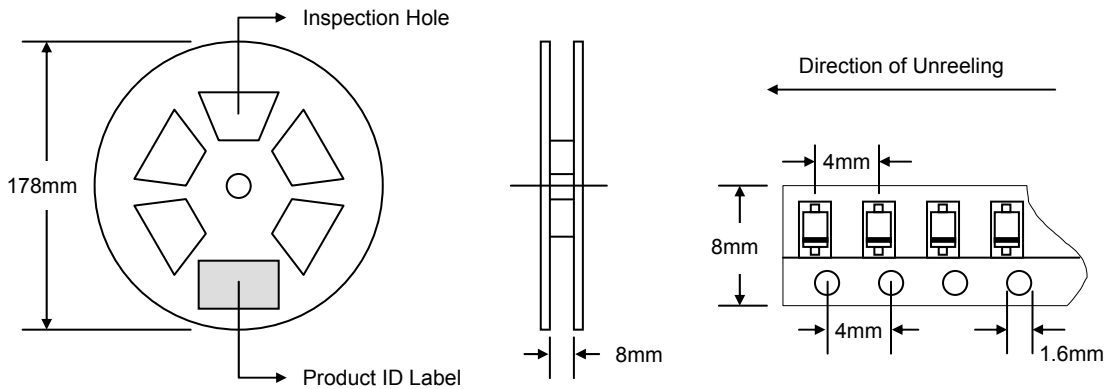
Cathode = Polarity Band
xx = Device Code, Table 1

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL




Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	7.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
BZT52BxxS-T1	SOD-323	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, BZT52B2V4S-T1-LF.**

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