

BZT52-C2V4-EVL~BZT52-C75-EVL

SURFACE MOUNT SILICON ZENER DIODES

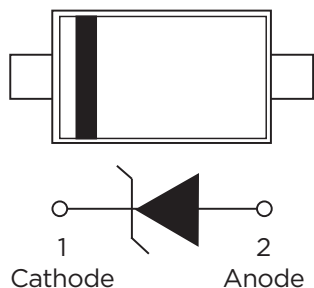
PART NUMBER	PACKAGE	VOLTAGE	POWER	CIRCUIT CONFIGURATION
BZT52-C2V4-□VL ~BZT52-C75-□VL E = 7" Embossed T&R (3,000) U = 13" Embossed T&R (10,000)	SOD-123	2.4-75V	410mW	SINGLE

FEATURES:

- Planar Die construction
- 410mW Power Dissipation
- Zener Voltages from 2.4-75V
- Ideally Suited for Automated Assembly Processes

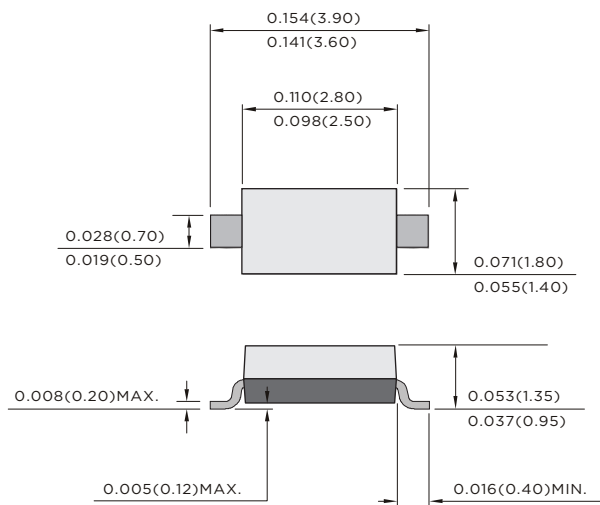
MECHANICAL DATA:

- 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



SOD-123

Units: inch (mm)



ENVIRONMENTAL INFORMATION

RoHS Status	10 of 10 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	1



MAXIMUM RATINGS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C UNLESS OTHERWISE NOTED)

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Power Dissipation (Note A) at 25°C	P _D	410	mW
Typical Thermal Resistance	R _{θJA}	510	°C/W
Operating Junction Temperature and Storage Temperature Range	T _J	-55 to +150	°C

NOTES:

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

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SURFACE MOUNT SILICON ZENER DIODES

ELECTRICAL CHARACTERISTICS

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

GRAPHS

Fig.1 Power Derating Curve

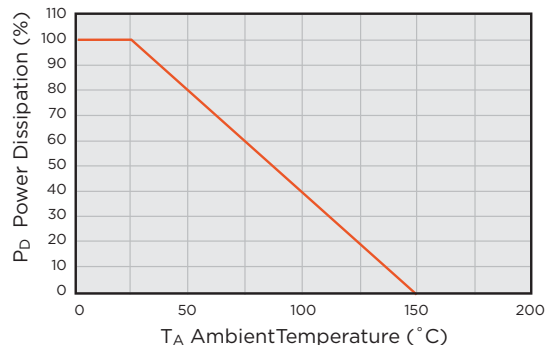


Fig.2 Typical Junction Capacitance

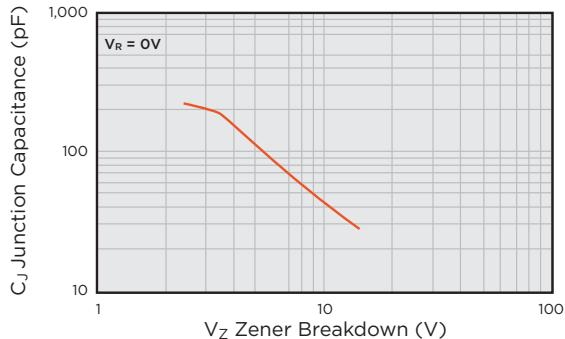


Fig.3 Typical Zener Breakdown

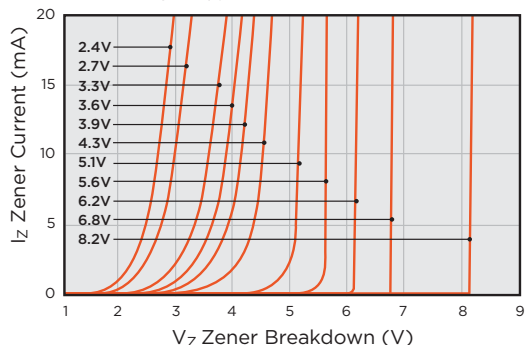


Fig.4 Typical Zener Breakdown

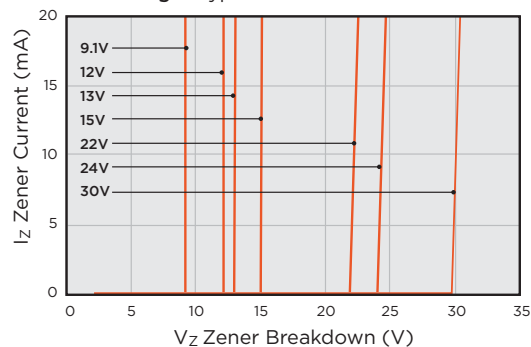
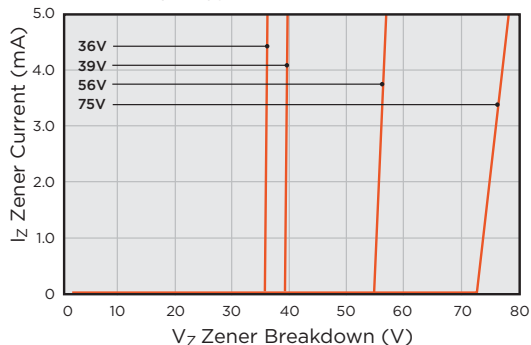


Fig.5 Typical Zener Breakdown



MOUNTING PAD LAYOUT

Units: inch (mm)

