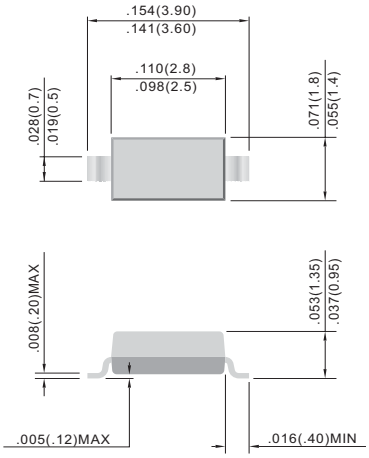
BZT52-C2V4 SERIES

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE 2.4 to 75 Volts **POWER** 500 mWatts

SOD-123 Unit: inch (mm)



FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Zener Voltages from 2.4~75V
- Ideally Suited for Automated Assembly Processes
- Pb free product : 99% Sn above can meet RoHS environment substance diective request

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Maximum Forward Voltage Drop at IF=100mA	V_F	1.0	V
Maximum Power Dissipation (Notes A) at 25°C	P_D	500	mW
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) (Notes B)	I_{FSM}	4.0	Amps
Operating Junction and StorageTemperature Range	T_J	-50 to +150	°C

NOTES:

A. Mounted on 5.0mm²(.013mm thick) land areas.

B. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

BZT52-C2V4 SERIES

Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code	Package
	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		
BZT52-C2V4	2.4	2.28	2.52	85	5.0	600	1.00	100	1.0	W1	SOD-123
BZT52-C2V7	2.7	2.57	2.84	83	5.0	600	1.00	75	1.0	W2	SOD-123
BZT52-C3	3.0	2.85	3.15	95	5.0	600	1.00	50	1.0	W3	SOD-123
BZT52-C3V3	3.3	3.14	3.47	95	5.0	600	1.00	25	1.0	W4	SOD-123
BZT52-C3V6	3.6	3.42	3.78	95	5.0	600	1.00	15	1.0	W5	SOD-123
BZT52-C3V9	3.9	3.71	4.10	95	5.0	600	1.00	10	1.0	W6	SOD-123
BZT52-C4V3	4.3	4.09	4.52	95	5.0	600	1.00	5.0	1.0	W7	SOD-123
BZT52-C4V7	4.7	4.47	4.94	78	5.0	500	1.00	5.0	2.0	W8	SOD-123
BZT52-C5V1	5.1	4.85	5.36	60	5.0	480	1.00	0.1	0.8	W9	SOD-123
BZT52-C5V6	5.6	5.32	5.88	40	5.0	400	1.00	0.1	1.0	WA	SOD-123
BZT52-C6V2	6.2	5.89	6.51	10	5.0	150	1.00	0.1	2.0	WB	SOD-123
BZT52-C6V8	6.8	6.46	7.14	8	5.0	80	1.00	0.1	3.0	WC	SOD-123
BZT52-C7V5	7.5	7.13	7.88	7	5.0	80	1.00	0.1	5.0	WD	SOD-123
BZT52-C8V2	8.2	7.79	8.61	7	5.0	80	1.00	0.1	6.0	WE	SOD-123
BZT52-C9V1	9.1	8.65	9.56	10	5.0	100	1.00	0.1	7.0	WF	SOD-123
BZT52-C10	10	9.50	10.50	15	5.0	150	1.00	0.1	7.5	WG	SOD-123
BZT52-C11	11	10.45	11.55	20	5.0	150	1.00	0.1	8.5	WH	SOD-123
BZT52-C12	12	11.40	12.60	20	5.0	150	1.00	0.1	9.0	WI	SOD-123
BZT52-C13	13	12.35	13.65	25	5.0	170	1.00	0.1	10.0	WK	SOD-123
BZT52-C14	14	13.30	14.70	25	5.0	170	1.00	0.1	10.5	WJ	SOD-123
BZT52-C15	15	14.25	15.75	30	5.0	200	1.00	0.1	11.0	WL	SOD-123
BZT52-C16	16	15.20	16.80	40	5.0	200	1.00	0.1	12.0	WM	SOD-123
BZT52-C17	17	16.15	17.85	40	5.0	200	1.00	0.1	13.0	17C	SOD-123
BZT52-C18	18	17.10	18.90	50	5.0	225	1.00	0.1	14.0	WN	SOD-123
BZT52-C20	20	19.00	21.00	50	5.0	225	1.00	0.1	15.0	WO	SOD-123
BZT52-C22	22	20.90	23.10	55	5.0	250	1.00	0.1	17.0	WP	SOD-123
BZT52-C24	24	22.80	25.20	80	5.0	250	1.00	0.1	18.0	WR	SOD-123
BZT52-C27	27	25.65	28.35	80	5.0	300	1.00	0.1	20.0	WS	SOD-123
BZT52-C28	28	26.60	29.40	80	5.0	300	1.00	0.1	22.0	28C	SOD-123
BZT52-C30	30	28.50	31.50	80	5.0	300	1.00	0.1	22.5	WT	SOD-123
BZT52-C33	33	31.35	34.65	80	5.0	325	1.00	0.1	25.0	WU	SOD-123
BZT52-C36	36	34.20	37.80	90	5.0	350	1.00	0.1	27.0	WW	SOD-123
BZT52-C39	39	37.05	40.95	90	5.0	350	1.00	0.1	29.0	WX	SOD-123
BZT52-C43	43	40.85	45.15	100	5.0	700	1.00	0.1	32.0	WY	SOD-123
BZT52-C47	47	44.65	49.35	100	5.0	750	1.00	0.1	35.0	WZ	SOD-123
BZT52-C51	51	48.45	53.55	100	5.0	750	1.00	0.1	38.0	XA	SOD-123
BZT52-C56	56	53.20	58.80	135	2.5	1000	1.00	0.1	42.0	X2	SOD-123
BZT52-C62	62	58.90	65.10	150	2.5	1000	1.00	0.1	46.0	X3	SOD-123
BZT52-C68	68	64.60	71.40	200	2.5	1000	1.00	0.1	51.0	X4	SOD-123
BZT52-C75	75	71.25	78.75	250	2.5	1000	1.00	0.1	56	X5	SOD-123

BZT52-C2V4 SERIES

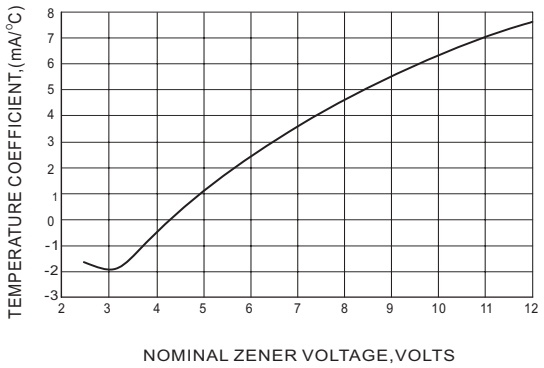


Fig.1 TEMPERATURE COEFFICENTS

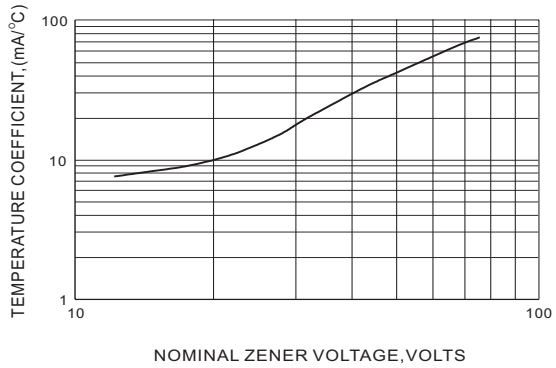


Fig.2 TEMPERATURE COEFFICENTS

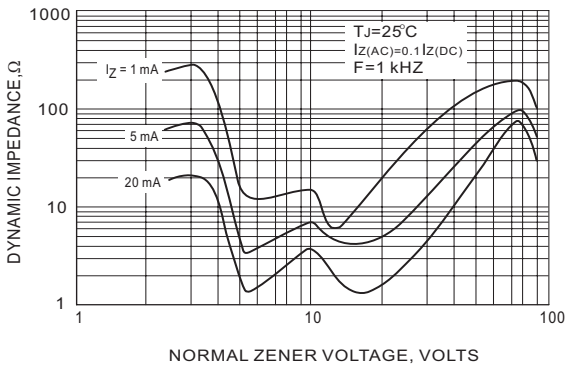


Fig.3 EFFECT OF ZENER VOLTAGE ON ZENER IMPEDANCE

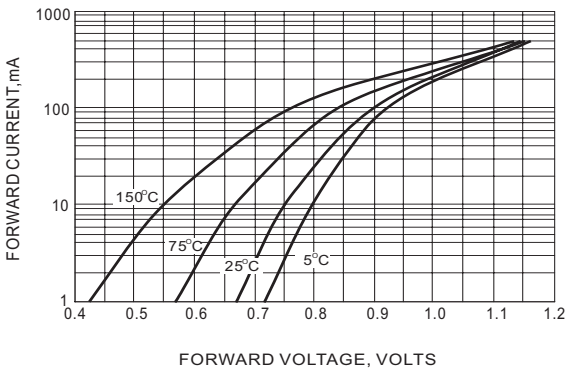


Fig.4 TYPICAL FORWARD VOLTAGE

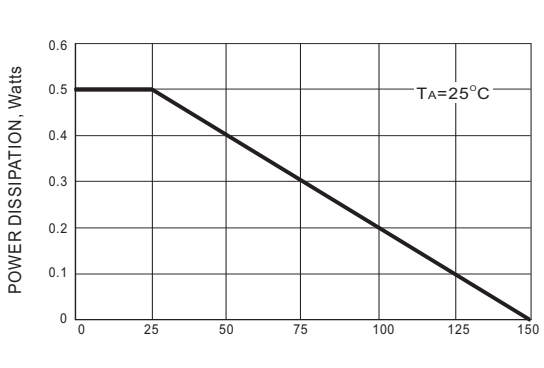


Fig.5 STEADY STATE POWER DERATING

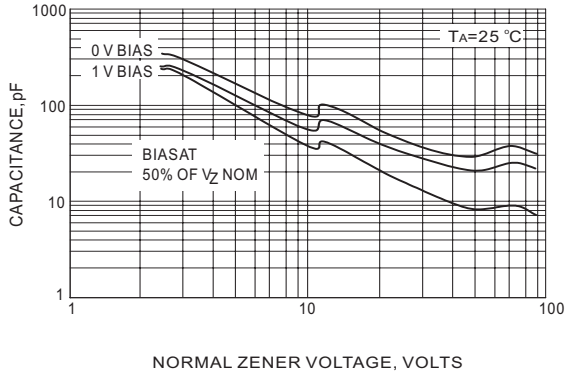


Fig.6 TYPICAL CAPACITANCE

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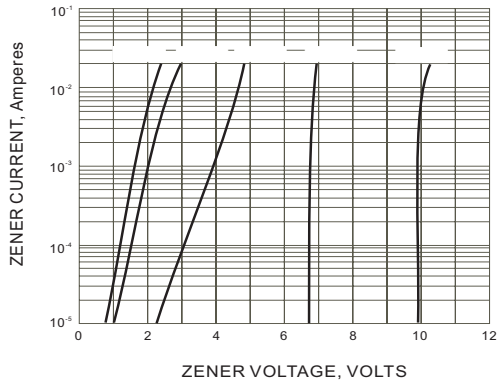

Fig.7 ZENER VOLTAGE VERSUS ZENER CURRENT

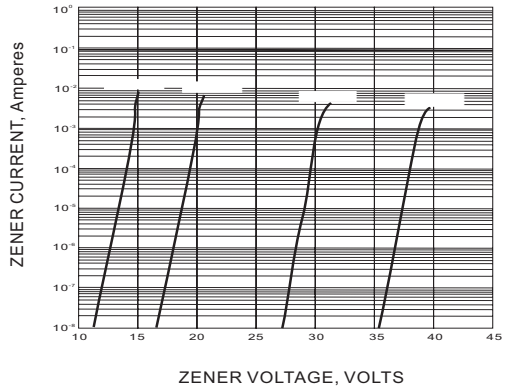

Fig.8 ZENER VOLTAGE VERSUS ZENER CURRENT

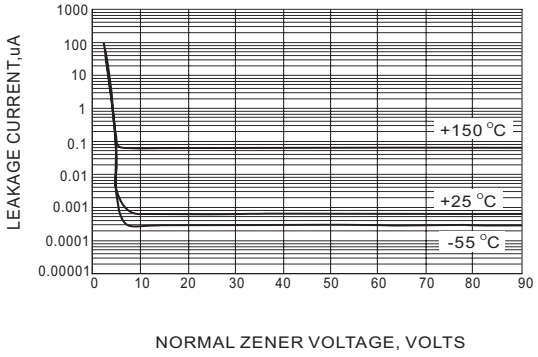

Fig.9 TYPICAL LEAKAGE CURRENT

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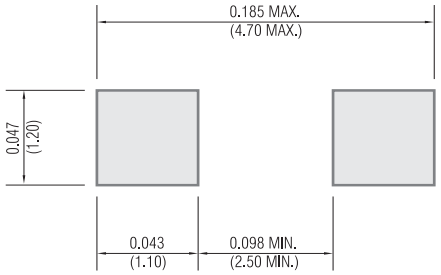
MOUNTING PAD LAYOUT

SOD-123 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

LEGAL STATEMENT