



BZT52C2V7T THRU BZT52C75T

Surface Mount Zener Voltage Regulators

FEATURES

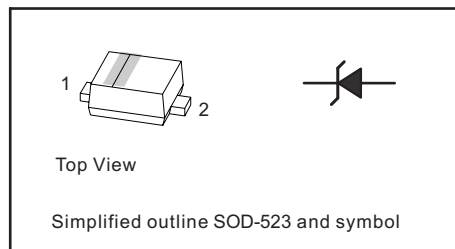
- Total power dissipation: Max. 0.35 W.
- Wide zener reverse voltage range 2.7V to 75V.
- Small plastic package suitable for surface mounted design.

MECHANICAL DATA

- Case: SOD-523
- Terminals: Solderable per MIL-STD-750, Method 2026

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



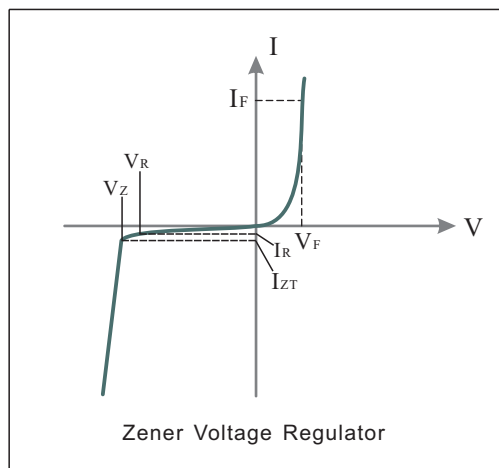
Absolute Maximum Ratings And Characteristics (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Power Dissipation at $T_L = 75^\circ\text{C}$	P_D	0.35	W
JUNCTION TEMPERATURE	T_j	125	$^\circ\text{C}$
STORAGE TEMPERATURE	T_{stg}	-55 ~ +125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

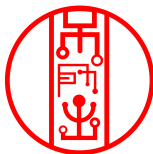
($T_L = 30^\circ\text{C}$ unless otherwise noted, $V_F = 0.90\text{ V Max.}$ @ $I_F = 10\text{ mA(DC)}$ for all types)

Symbol	Parameter
V_Z	Reverse Zener Voltage @ I_{ZT}
I_{ZT}	Reverse Current
Z_{ZT}	Maximum Zener Impedance @ I_{ZT}
I_{ZK}	Reverse Current
Z_{ZK}	Maximum Zener Impedance @ I_{ZK}
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F
I_{ZM}	Maximum DC Zener Current



Notes On Page 3:

1. Tolerance and type number designation the type numbers listed indicate a tolerance of 5%
2. Zener voltage (V_Z) measurement Nominal Zener voltage is measured with the device junction in thermal equilibrium with ambient temperature 25°C
3. Zener impedance (Z_Z) derivation : Z_{ZT} and Z_{ZK} are measured by dividing the AC voltage drop across the device by the AC current applied.
The specified limits are for $I_Z(\text{AC}) = 0.1 I_Z(\text{DC})$ with the AC frequency = 60 Hz



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BZT52C*** Series (VZ $\pm 5.0\%$)

VF(@10mA) Max. 0.90V for all Types

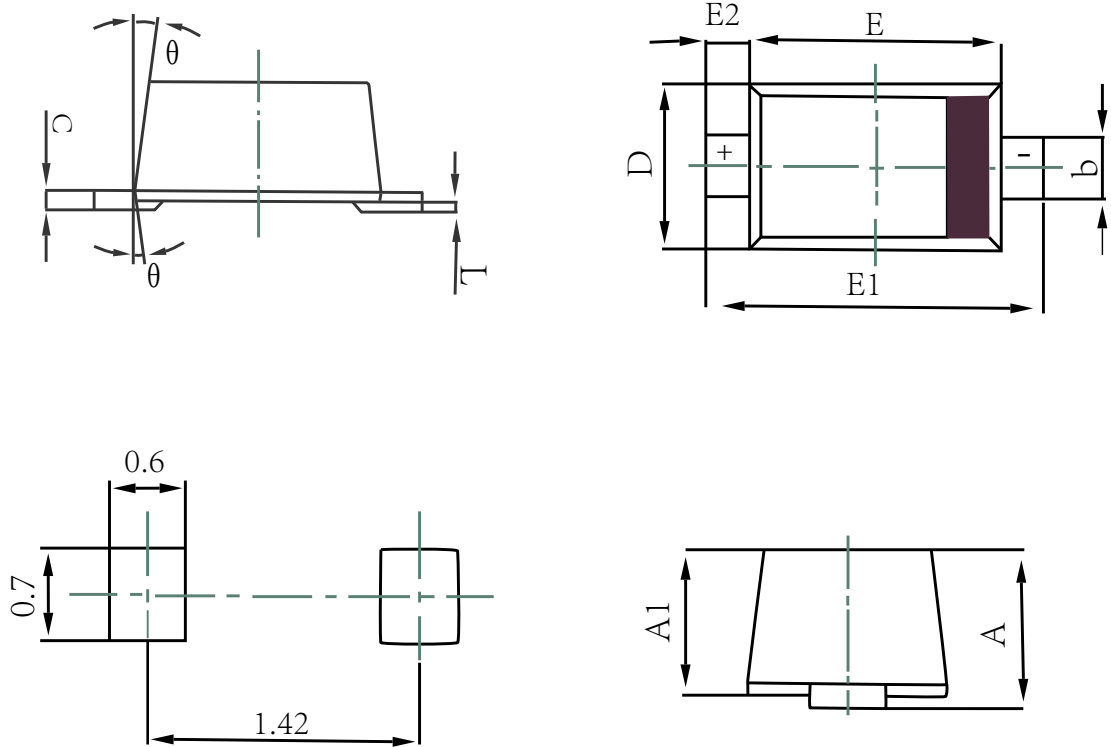
Type	Marking	VZ (V)				IR (μ A)		ZZT (ohm)		ZZK (ohm)	
		Nom	MIN	MAX	Iz(mA)	MAX	VR(V)	MAX	Iz(mA)	MAX	Iz(mA)
BZT52C2V7T	W1	2.7	2.5	2.9	5	20	1	100	5	600	1.0
BZT52C3V0T	W2	3.0	2.8	3.2	5	10	1	95	5	600	1.0
BZT52C3V3T	W3	3.3	3.1	3.5	5	5	1	95	5	600	1.0
BZT52C3V6T	W4	3.6	3.4	3.8	5	5	1	90	5	600	1.0
BZT52C3V9T	W5	3.9	3.7	4.1	5	3	1	90	5	600	1.0
BZT52C4V3T	W6	4.3	4.0	4.6	5	3	1	90	5	600	1.0
BZT52C4V7T	W7	4.7	4.4	5.0	5	3	2	80	5	500	1.0
BZT52C5V1T	W8	5.1	4.8	5.4	5	2	2	60	5	480	1.0
BZT52C5V6T	W9	5.6	5.2	6.0	5	1	2	40	5	400	1.0
BZT52C6V2T	WA	6.2	5.8	6.6	5	3	4	10	5	150	1.0
BZT52C6V8T	WB	6.8	6.4	7.2	5	2	4	15	5	80	1.0
BZT52C7V5T	WC	7.5	7.0	7.9	5	1	5	15	5	80	1.0
BZT52C8V2T	WD	8.2	7.7	8.7	5	0.7	5	15	5	80	1.0
BZT52C9V1T	WE	9.1	8.5	9.6	5	0.5	6	15	5	100	1.0
BZT52C10T	WF	10	9.4	10.6	5	0.2	7	20	5	150	1.0
BZT52C11T	WG	11	10.4	11.6	5	0.1	8	20	5	150	1.0
BZT52C12T	WH	12	11.4	12.7	5	0.1	8	25	5	150	1.0
BZT52C13T	WI	13	12.4	14.1	5	0.1	8	30	5	170	1.0
BZT52C15T	WJ	15	13.8	15.6	5	0.05	10.5	30	5	200	1.0
BZT52C16T	WK	16	15.3	17.1	5	0.05	11.2	40	5	200	1.0
BZT52C18T	WL	18	16.8	19.1	5	0.05	12.6	45	5	225	1.0
BZT52C20T	WM	20	18.8	21.2	5	0.05	14.0	55	5	225	1.0
BZT52C22T	WN	22	20.8	23.3	5	0.05	15.4	55	5	250	1.0
BZT52C24T	WO	24	22.8	25.6	5	0.05	16.8	70	5	250	1.0
BZT52C27T	WP	27	25.1	28.9	2	0.05	18.9	80	2	300	0.5
BZT52C30T	WQ	30	28.0	32.0	2	0.05	21.0	80	2	300	0.5
BZT52C33T	WR	33	31.0	35.0	2	0.05	23.1	80	2	325	0.5
BZT52C36T	WS	36	34.0	38.0	2	0.05	25.2	90	2	350	0.5
BZT52C39T	WT	39	37.0	41.0	2	0.05	27.3	130	2	350	0.5
BZT52C43T	WU	43	40.0	46.0	2	0.05	30.1	150	2	375	0.5
BZT52C47T	WV	47	44.0	50.0	2	0.05	32.9	170	2	375	0.5
BZT52C51T	WW	51	48.0	54.0	2	0.05	35.7	180	2	400	0.5
BZT52C56T	WX1	56	52.0	60.0	2	0.05	39.2	200	2	425	0.5
BZT52C62T	WY	62	58.0	66.0	2	0.05	43.4	215	2	450	0.5
BZT52C68T	WZ	68	64.0	72.0	2	0.05	47.6	240	2	475	0.5
BZT52C75T	WZ1	75	70.0	79.0	2	0.05	52.5	255	2	500	0.5



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Package Dimensions

SOD-523



Unit	A	A1	b	c	D	E	E1	E2	L	θ
Max.	0.77	0.70	0.35	0.15	0.85	1.30	1.70	0.20	0.07	7°
Min.	0.51	0.50	0.25	0.08	0.75	1.10	1.50	REF.	0.01	REF.