

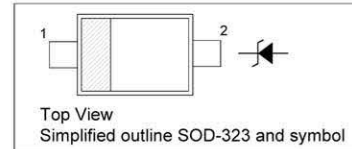
SURFACE MOUNT SILICON ZENER DIODES

● Features

- Ideally suited for automated assembly processes
- Total power dissipation: max. 200 mW

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



● ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Maximum Forward Voltage Drop @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation @ 25°C	P_D	200	mW
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	2.0	A
Operating Junction and Storage Temperature Range	T_j	- 55 to +150	°C

* Mounted on 5.0mm² (0.13mm thick) land areas

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

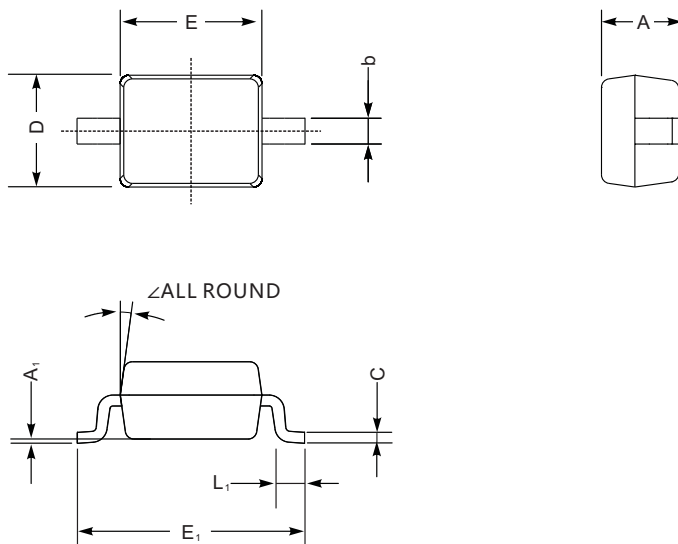
● ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$ unless specified otherwise) $V_F @ 10\text{mA} < 0.9\text{V}$

Device #	Zener Voltage		Zener Impedance				Reverse Leakage Current		Marking Code
	$V_Z @ I_{ZT}$		$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @$	V_R	
	(V)		(Ω)	(mA)	(Ω)	(mA)	(μA)	(V)	
	min	max	max		max		max		
BZT52C 4V3S	4.09	4.52	95	5.0	500	1.0	5.0	1.0	W7
BZT52C 4V7S	4.47	4.94	78	5.0	500	1.0	5.0	2.0	W8
BZT52C 5V1S	4.85	5.36	60	5.0	480	1.0	0.1	0.8	W9
BZT52C 5V6S	5.32	5.88	40	5.0	400	1.0	0.1	1.0	WA
BZT52C 6V2S	5.89	6.51	10	5.0	200	1.0	0.1	2.0	WB
BZT52C 6V8S	6.46	7.14	8	5.0	150	1.0	0.1	3.0	WC
BZT52C 7V5S	7.13	7.88	7	5.0	50	1.0	0.1	5.0	WD
BZT52C 8V2S	7.79	8.61	7	5.0	50	1.0	0.1	6.0	WE
BZT52C 9V1S	8.65	9.56	10	5.0	50	1.0	0.1	7.0	WF
BZT52C 10S	9.50	10.50	15	5.0	70	1.0	0.1	7.5	WG
BZT52C 11S	10.45	11.55	20	5.0	70	1.0	0.1	8.5	WH
BZT52C 12S	11.40	12.60	20	5.0	90	1.0	0.1	9.0	WI
BZT52C 13S	12.35	13.65	25	5.0	110	1.0	0.1	10	WK
BZT52C 15S	14.25	15.75	30	5.0	110	1.0	0.1	11	WL
BZT52C 16S	15.20	16.80	40	5.0	170	1.0	0.1	12	WM
BZT52C 18S	17.10	18.90	50	5.0	170	1.0	0.1	14	WN
BZT52C 20S	19.00	21.00	50	5.0	220	1.0	0.1	15	WO
BZT52C 22S	20.90	23.10	55	5.0	220	1.0	0.1	17	WP
BZT52C 24S	22.80	25.20	80	5.0	220	1.0	0.1	18	WR
BZT52C 27S	25.65	28.35	80	5.0	250	1.0	0.1	20	WS
BZT52C 30S	28.50	31.50	80	5.0	250	1.0	0.1	22.5	WT
BZT52C 33S	31.35	34.65	80	5.0	250	1.0	0.1	25	WU
BZT52C 36S	34.20	37.80	90	5.0	250	1.0	0.1	27	WW
BZT52C 39S	37.05	40.95	90	5.0	300	1.0	0.1	29	WX

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size

