

**SURFACE MOUNT SILICON ZENER DIODES**

**BZT52C 4V3S to 39S**

**SOD-323  
PLASTIC PACKAGE**



Marking: As Indicated below with Cathode Band

**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 5.0mm<sup>2</sup> ( 0.13mm thick) land areas

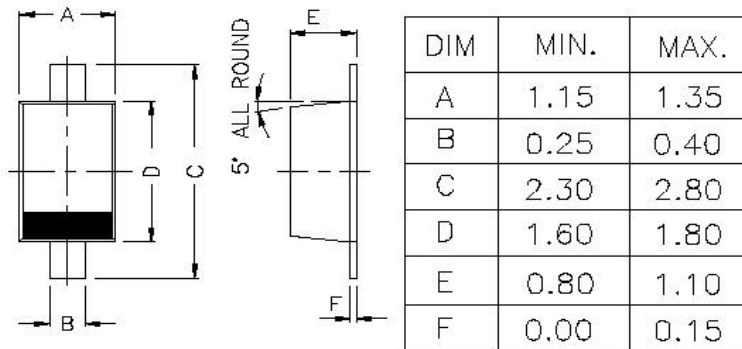
\*\* Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

**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)		(W)	(mA)	(W)	(mA)	(mA)	(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

BZT52C4V3S\_39S Rev200105E

## PACKAGE SOD-323 FL



All dimensions are in mm

CATHODE IS MARKED BY BAND

### Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

### **Disclaimer**

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