

### Continental Device India Limited

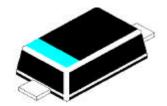
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



## SURFACE MOUNT SILICON ZENER DIODES

**BZT52C 4V7 to 39V** 

SOD-123 PLASTIC PACKAGE



## Marking: As Indicated below with Cathode Band

### **ABSOLUTE MAXIMUM RATINGS**

DESCRIPTION	SYMBOL	VALUE	UNIT
Forward Voltage Drop @ I <sub>F</sub> 10mA	$V_{F}$	0.9	V
Power Dissipation @ 25°C	*P <sub>D</sub>	410	mW
Peak Forward Surge Current, 8.3ms Single Half Sine-WaveSuperimposed on Rated Load	**I <sub>FSM</sub>	2.0	А
Operating Junction and Storage Temperature Range	T <sub>j</sub>	- 55 to +150	°C

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

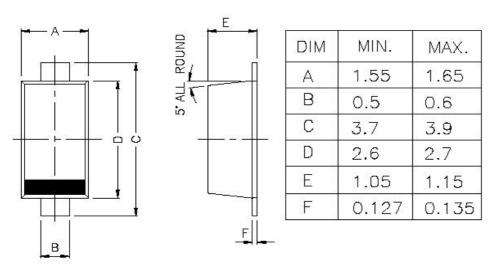
ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise) V<sub>F</sub> @ 10mA <0.9V

Device #		Zener Impedance			Reverse Leakage				
	Zener Voltage				Current				
	V <sub>z</sub> @ I <sub>zT</sub> (V)		Z <sub>ZT @</sub> I <sub>ZT</sub> Z		Z <sub>ZK</sub> @	Z <sub>ZK @</sub> I <sub>ZK</sub>		$V_R$	Marking Code
			( <b>W</b> )	(mA)	(W)	(mA)	(mA)	(V)	Code
	min	max	max		max		max		
BZT52C 4V7	4.47	4.94	78	5.0	500	1.0	5.0	1.0	W8
BZT52C 5V1	4.85	5.36	60	5.0	480	1.0	0.1	8.0	W9
BZT52C 5V6	5.32	5.88	40	5.0	400	1.0	0.1	1.0	WA
BZT52C 6V2	5.89	6.51	10	5.0	200	1.0	0.1	2.0	WB
BZT52C 6V8	6.46	7.14	8	5.0	150	1.0	0.1	3.0	WC
BZT52C 7V5	7.13	7.88	7	5.0	50	1.0	0.1	5.0	WD
BZT52C 8V2	7.79	8.61	7	5.0	50	1.0	0.1	6.0	WE
BZT52C 9V1	8.65	9.56	10	5.0	50	1.0	0.1	7.0	WF
BZT52C 10	9.50	10.50	15	5.0	70	1.0	0.1	7.5	WG
BZT52C 11	10.45	11.55	20	5.0	70	1.0	0.1	8.5	WH
BZT52C 12	11.40	12.60	20	5.0	90	1.0	0.1	9.0	WI
BZT52C 13	12.35	13.65	25	5.0	110	1.0	0.1	10	WK
BZT52C 15	14.25	15.75	30	5.0	110	1.0	0.1	11	WL
BZT52C 16	15.20	16.80	40	5.0	170	1.0	0.1	12	WM
BZT52C 18	17.10	18.90	50	5.0	170	1.0	0.1	14	WN
BZT52C 20	19.00	21.00	50	5.0	220	1.0	0.1	15	WO
BZT52C 22	20.90	23.10	55	5.0	220	1.0	0.1	17	WP
BZT52C 24	22.80	25.20	80	5.0	220	1.0	0.1	18	WR
BZT52C 27	25.65	28.35	80	5.0	250	1.0	0.1	20	WS
BZT52C 30	28.50	31.50	80	5.0	250	1.0	0.1	22.5	WT
BZT52C 33	31.35	34.65	80	5.0	250	1.0	0.1	25	WU
BZT52C 36	34.20	37.80	90	5.0	250	1.0	0.1	27	WW
BZT52C 39	37.05	40.95	90	5.0	300	1.0	0.1	29	WX

BZT52C4V7\_39V Rev180105E

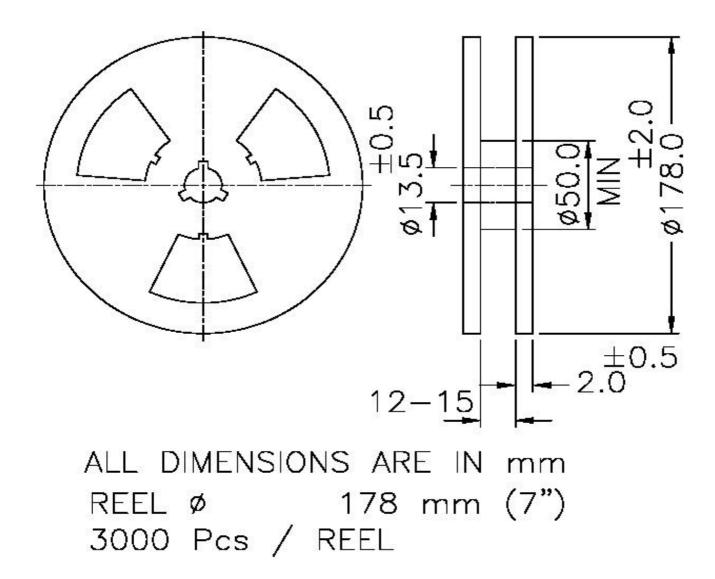
<sup>\*\*</sup> Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum

# PACKAGE SOD-123 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).

### BZT52C4V7\_39V Rev180105E

Customer Notes BZT52C 4V7 to 39V

SOD-123 PLASTIC PACKAGE

### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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