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_F 10mA	V_F	0.9	V
Power Dissipation @ 25ºC	*P_D	410	mW
Peak Forward Surge Current, 8.3ms Single Half Sine-WaveSuperimposed on Rated Load	**I_{FSM}	2.0	A
Operating Junction and Storage Temperature Range	T_j	- 55 to +150	°C

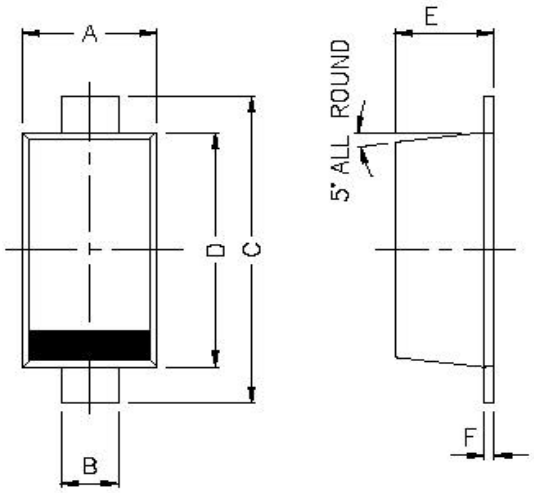
*** Mounted on 5.0mm^2 (0.13mm thick) land areas**

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

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise) V_F @ 10mA <0.9V

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 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	0.8	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

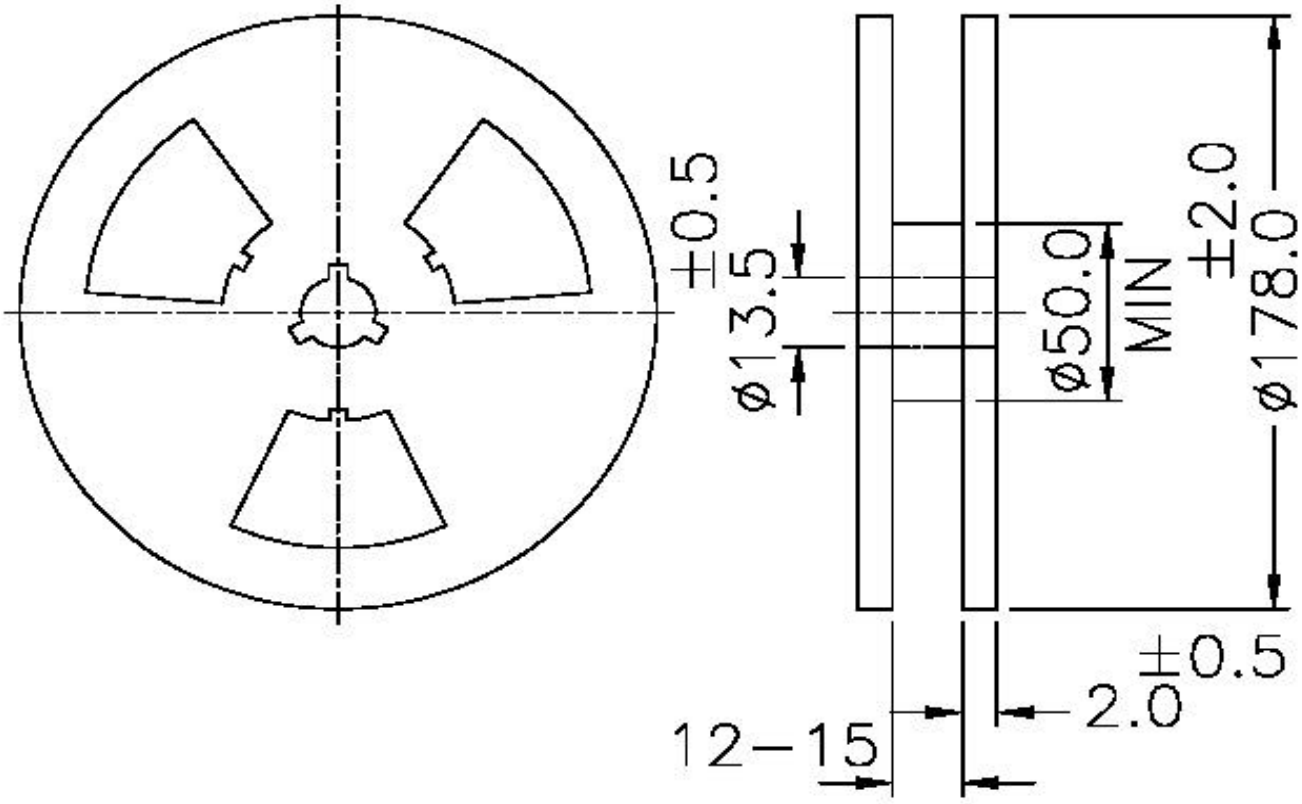
PACKAGE SOD–123 FL



DIM	MIN.	MAX.
A	1.55	1.65
B	0.5	0.6
C	3.7	3.9
D	2.6	2.7
E	1.05	1.15
F	0.127	0.135

All dimensions are in mm

CATHODE IS MARKED BY BAND



ALL DIMENSIONS ARE IN mm
REEL ø 178 mm (7")
3000 Pcs / REEL

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

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).

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