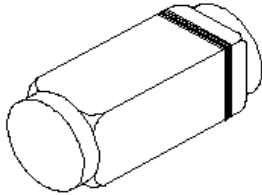


**SURFACE MOUNT SILICON ZENER DIODES**

**BZT55C 3V3 to 68V**

**QUADRO MELF  
(LS-34)**



**Polarity:** Cathode is indicated by a band

**Voltage Stabilization Applications**

**ABSOLUTE MAXIMUM RATINGS (T<sub>j</sub>=25°C)**

DESCRIPTION	SYMBOL	VALUE	UNIT
Power Dissipation (R <sub>th(j-a)</sub> ≤ 300K/W)	P <sub>D</sub>	500	mW
Z-Current	I <sub>Z</sub>	P <sub>D</sub> /V <sub>Z</sub>	mA
Maximum Forward Voltage @ I <sub>F</sub> = 200mA	V <sub>F</sub>	1.5	V
Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to +175	°C

**THERMAL RESISTANCE**

Junction to Ambient in Free Air	*R <sub>th(j-a)</sub>	500	K/W
---------------------------------	-----------------------	-----	-----

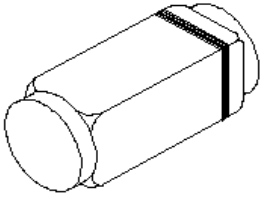
\* On PC Board 50mm x 50mm x 1.6mm

**ELECTRICAL CHARACTERISTICS (T<sub>j</sub>=25°C unless specified otherwise) V<sub>F</sub> @ 200mA <1.5V**

Device #	Zener Voltage		Zener Impedance				Reverse Leakage Current			TK <sub>VZ</sub>
	*V <sub>Z</sub> @ I <sub>ZT</sub>		Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ 25°C	I <sub>R</sub> @ 150°C	V <sub>R</sub>	
	(V)		(W)	(mA)	(W)	(mA)	(mA)	(mA)	(V)	%/K
	min	max	max		max		max	max		
BZT55C 3V3	3.10	3.50	90	5.0	600	1.0	2.0	40	1.0	- 0.08 to -0.05
BZT55C 3V6	3.40	3.80	90	5.0	600	1.0	2.0	40	1.0	- 0.08 to -0.05
BZT55C 3V9	3.70	4.10	90	5.0	600	1.0	2.0	40	1.0	- 0.08 to -0.05
BZT55C 4V3	4.00	4.60	90	5.0	600	1.0	1.0	20	1.0	- 0.06 to -0.03
BZT55C 4V7	4.40	5.00	80	5.0	600	1.0	0.5	10	1.0	- 0.05 to +0.02
BZT55C 5V1	4.80	5.40	60	5.0	550	1.0	0.1	2.0	1.0	- 0.02 to +0.02
BZT55C 5V6	5.20	6.00	40	5.0	450	1.0	0.1	2.0	1.0	0.05 to +0.05
BZT55C 6V2	5.80	6.60	10	5.0	200	1.0	0.1	2.0	2.0	0.03 to 0.06
BZT55C 6V8	6.40	7.20	8	5.0	150	1.0	0.1	2.0	3.0	0.03 to 0.07
BZT55C 7V5	7.00	7.90	7	5.0	50	1.0	0.1	2.0	5.0	0.03 to 0.07
BZT55C 8V2	7.70	8.70	7	5.0	50	1.0	0.1	2.0	6.2	0.03 to 0.08
BZT55C 9V1	8.50	9.60	10	5.0	50	1.0	0.1	2.0	6.8	0.03 to 0.09
BZT55C 10	9.40	10.60	15	5.0	70	1.0	0.1	2.0	7.5	0.03 to 0.10
BZT55C 11	10.40	11.60	20	5.0	70	1.0	0.1	2.0	8.2	0.03 to 0.11
BZT55C 12	11.40	12.70	20	5.0	90	1.0	0.1	2.0	9.1	0.03 to 0.11
BZT55C 13	12.40	14.10	26	5.0	110	1.0	0.1	2.0	10	0.03 to 0.11
BZT55C 15	13.80	15.60	30	5.0	110	1.0	0.1	2.0	11	0.03 to 0.11

\*T<sub>p</sub>/T<sub>≤</sub>100ms

BZT55C3V9\_68V Rev080405E

ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$  unless specified otherwise)  $V_F @ 200\text{mA} < 1.5\text{V}$ 

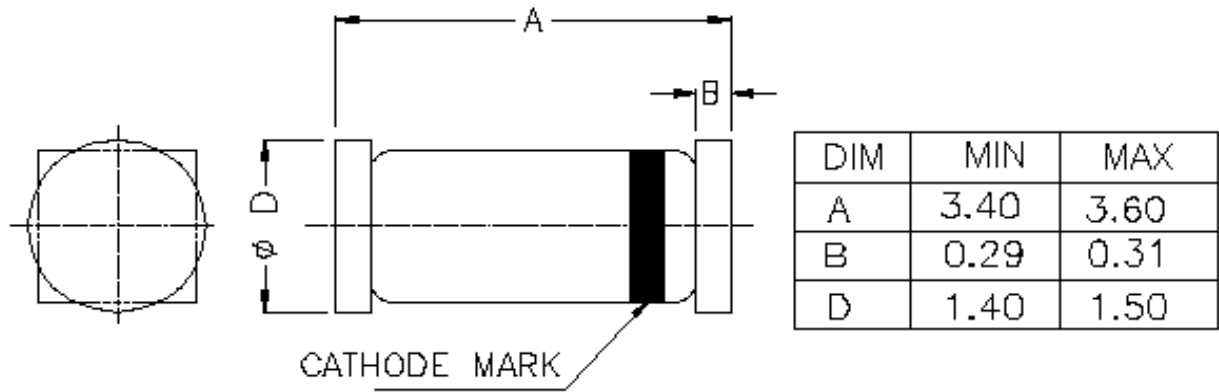
Device #	Zener Voltage		Zener Impedance				Reverse Leakage Current			TK <sub>VZ</sub>
	*V <sub>Z</sub> @ I <sub>ZT</sub>		Z <sub>ZT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ 25°C	I <sub>R</sub> @ 150°C	V <sub>R</sub>	
	(V)		(W)	(mA)	(W)	(mA)	(mA)	(mA)	(V)	%/K
	min	max	max		max		max	max		
BZT55C 16	15.30	17.10	40	5.0	170	1.0	0.1	2.0	12	0.03 to 0.11
BZT55C 18	16.80	19.10	50	5.0	170	1.0	0.1	2.0	13	0.03 to 0.11
BZT55C 20	18.80	21.20	55	5.0	220	1.0	0.1	2.0	15	0.03 to 0.11
BZT55C 22	20.80	23.30	55	5.0	220	1.0	0.1	2.0	16	0.04 to 0.12
BZT55C 24	22.80	25.60	80	5.0	220	1.0	0.1	2.0	18	0.04 to 0.12
BZT55C 27	25.10	28.90	80	5.0	220	1.0	0.1	2.0	20	0.04 to 0.12
BZT55C 30	28.00	32.00	80	5.0	220	1.0	0.1	2.0	22	0.04 to 0.12
BZT55C 33	31.00	35.00	80	5.0	220	1.0	0.1	2.0	24	0.04 to 0.12
BZT55C 36	34.00	38.00	80	5.0	220	1.0	0.1	2.0	27	0.04 to 0.12
BZT55C 39	37.00	41.00	90	2.5	500	0.5	0.1	5.0	30	0.04 to 0.12
BZT55C 43	40.00	46.00	90	2.5	600	0.5	0.1	5.0	33	0.04 to 0.12
BZT55C 47	44.00	50.00	110	2.5	700	0.5	0.1	5.0	36	0.04 to 0.12
BZT55C 51	48.00	54.00	125	2.5	700	0.5	0.1	10	39	0.04 to 0.12
BZT55C 56	52.00	60.00	135	2.5	1000	0.5	0.1	10	43	0.04 to 0.12
BZT55C 62	58.00	66.00	150	2.5	1000	0.5	0.1	10	47	0.04 to 0.12
BZT55C 68	64.00	72.00	200	2.5	1000	0.5	0.1	10	51	0.04 to 0.12

\*T<sub>p</sub>/T ≤ 100ms

BZT55C3V9\_68V Rev080405E

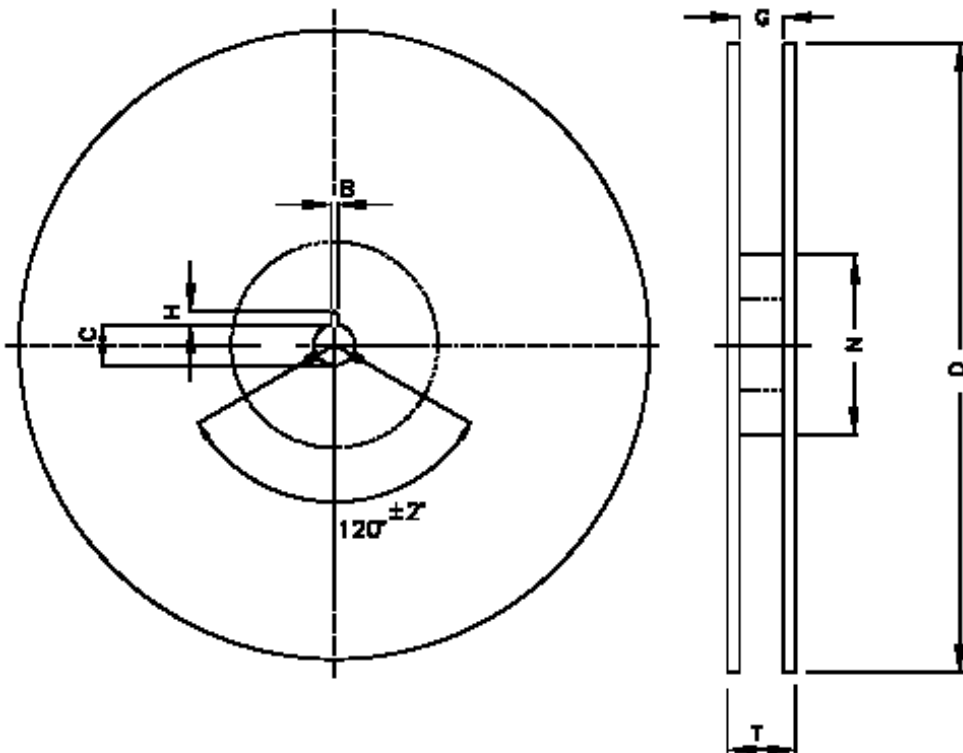
**BZT55C 3V3 to 68V**

**QUADRO MELF  
(LS-34)**



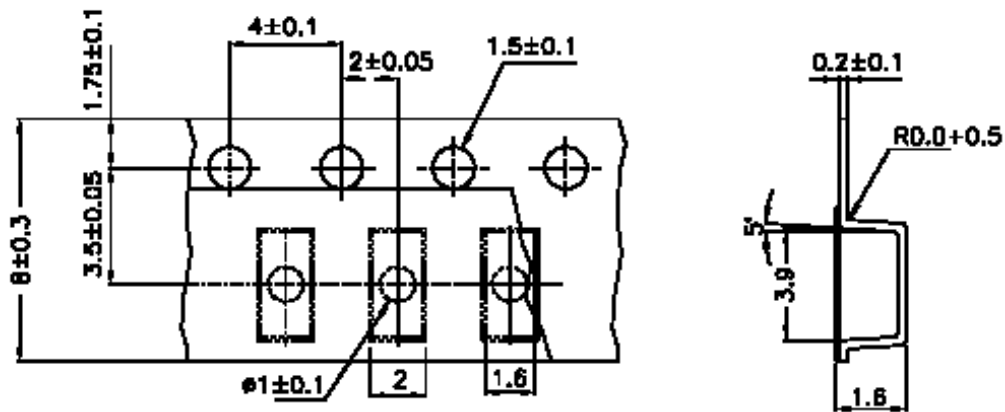
ALL DIMENSIONS ARE IN mm

QUADRO MELF  
(LS-34)



B	2 ±0.5
C	13 ±0.5
D	178±2
G	8.4±1.5
H	4±0.5
N	60
T	<14.9

All dimensions are in mm  
2500 Pcs/Reel



Accumulated pitch tolerance is ±0.2 mm over 10 pitches  
8-mm CARRIER TAPE FOR QUADRO MELF - LS34 PACKAGE  
ALL DIMENSIONS ARE IN mm

### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Discrete 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 Discrete 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.



CDIL is a registered Trademark of  
Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Zener Diodes](#) category:*

*Click to view products by [CDIL](#) manufacturer:*

Other Similar products are found below :

[MMSZ5245BS-7-F](#) [RKZ13B2KG#P1](#) [RKZ5.6B2KJ#R1](#) [EDZTE6113B](#) [EDZTE6116B](#) [EDZTE616.8B](#) [1N747A](#) [1N966B](#) [NTE5116A](#)  
[NTE5121A](#) [NTE5139A](#) [NTE5147A](#) [NTE5152A](#) [NTE5156A](#) [NTE5164A](#) [JANS1N4974US](#) [SMAJ4764A-TP](#) [RKZ5.1BKU#P6](#)  
[3SMAJ5946B-TP](#) [3SMAJ5950B-TP](#) [3SMBJ5920B-TP](#) [3SMBJ5925B-TP](#) [TDZTR24](#) [441774C](#) [MMSZ4678-TP](#) [MMSZ5232BQ-13-F](#)  
[BZG04-36](#) [BZG05C9V1-HE3-TR](#) [HZM30NBTR-E](#) [UDZTE-175.1B](#) [3SMAJ5945B-TP](#) [3SMAJ5947B-TP](#) [3SMBJ5941B-TP](#) [DL4746A-TP](#)  
[RKZ18B2KK#R1](#) [RKZ10B2KL#R1](#) [RKZ6.8B2KL#R1](#) [RKZ8.2B2KL#R1](#) [DZ2S240M0L](#) [SMAZ27-TP](#) [SMBZ5920B-E3/52](#) [ZMM3.0](#)  
[RD16UM-T1-A](#) [RD39S-T1-A](#) [RD9.1S-T1-A](#) [RD10S-T1-A](#) [RD20S-T1-A](#) [RD2.2S-T1-A](#) [RD2.7UM-T1-A](#) [HZM24NB1TL-E](#)