

General Notes:**Resistors** ( $\frac{1}{4}$  watt, +/- 5%)

Value	Reference	Total	Description	Mouser # (or option)
100R	R20, R41	2		660-MF1/4LCT52R101J
220R	R23, R44	2		660-MF1/4LCT52R221J
680R	R22, R43	2		71-CCF07680RJKE36
1K5	R21, R42	2		660-MF1/4LCT52R152J
3K57	R5, R7, R8, R10, R11, R13, R14, R16, R17, R19, R25, R27, R29, R31, R33, R35, R37, R39	18	1 %	71-CCF553K57FKE36
10K	R24, R45	2		660-MF1/4LCT52R103J
15K	R18	1	1 %	66-CMF1/41502FLFTR
22K	R26, R30, R34, R38	4		660-MF1/4LCT52R223J
68K	R1	1		279-RR02J68KTB
82K	R4	1		71-CCF0782K0JKE36
100K	R2, R9, R12, R15	4	1 %	603-MFR-25FTF52-100K
150K	R3, R6	2		594-SFR16S0001503JA5
25k	R28, R32, R36, R40	4	3296 trimmer	652-3296X-1-253LF

**Capacitors**

Value	Reference	Total	Description	Mouser # (or option)
220pf	C6	1		505-FKP2C002201D00KI
470pf	C5, C11	2		505-FKP2G004701D00KS
4.7nf	C4, C10	2		594-2222-370-65472
47nf	C3, C9	2		594-2222-370-21473
470nf	C2, C8	2		594-2222-370-11474
1uf	C1	1		555-RFS50V010MF3#5
100uf	C7, C12, C13	3		647-UFG1A101MEM1TD

## Transistors

Value	Reference	Total	Description	Mouser # (or option)
PN3565	Q1, Q3, Q5, Q7, Q9, Q11, Q13, Q15, Q17, Q19, Q21	11		610-PN3565
2N3906	Q2, Q4, Q6, Q8, Q10, Q12, Q14, Q16, Q18, Q20, Q22	11		512-2N3906TAR

## Miscellaneous

	Total	Description	Mouser # (or option)
Switchcraft Tini Jax	5	Audio inputs, Audio outputs	502-41
Standoffs	4	14mm, M3	855-R30-3011402
EDAC power connector	1	<i>optional</i>	587-306-50-010

## Mouser Cart

*\*NB: potentiometers, screws, EDAC power connector are not included in the Mouser Cart.*

*\*Some items may be backordered.*

<https://www.mouser.com/ProjectManager/ProjectDetail.aspx?AccessID=1aa512944a>

## Calibration

(The following is paraphrased from the Bode 1630 service manual):

*"Set the variable resistors for 90° phase shift at the frequency corresponding to that pair of stages [...] and adjust for 90° phase shift by displaying the two board outputs on X and Y axes [of your oscilloscope] and adjusting for [a] perfectly round circle."*

The schematic suggests 10hz, 100hz, 1khz, and 5khz as the "frequencies corresponding to each stage". The idea is to keep the circle as round as possible throughout the entire frequency range.