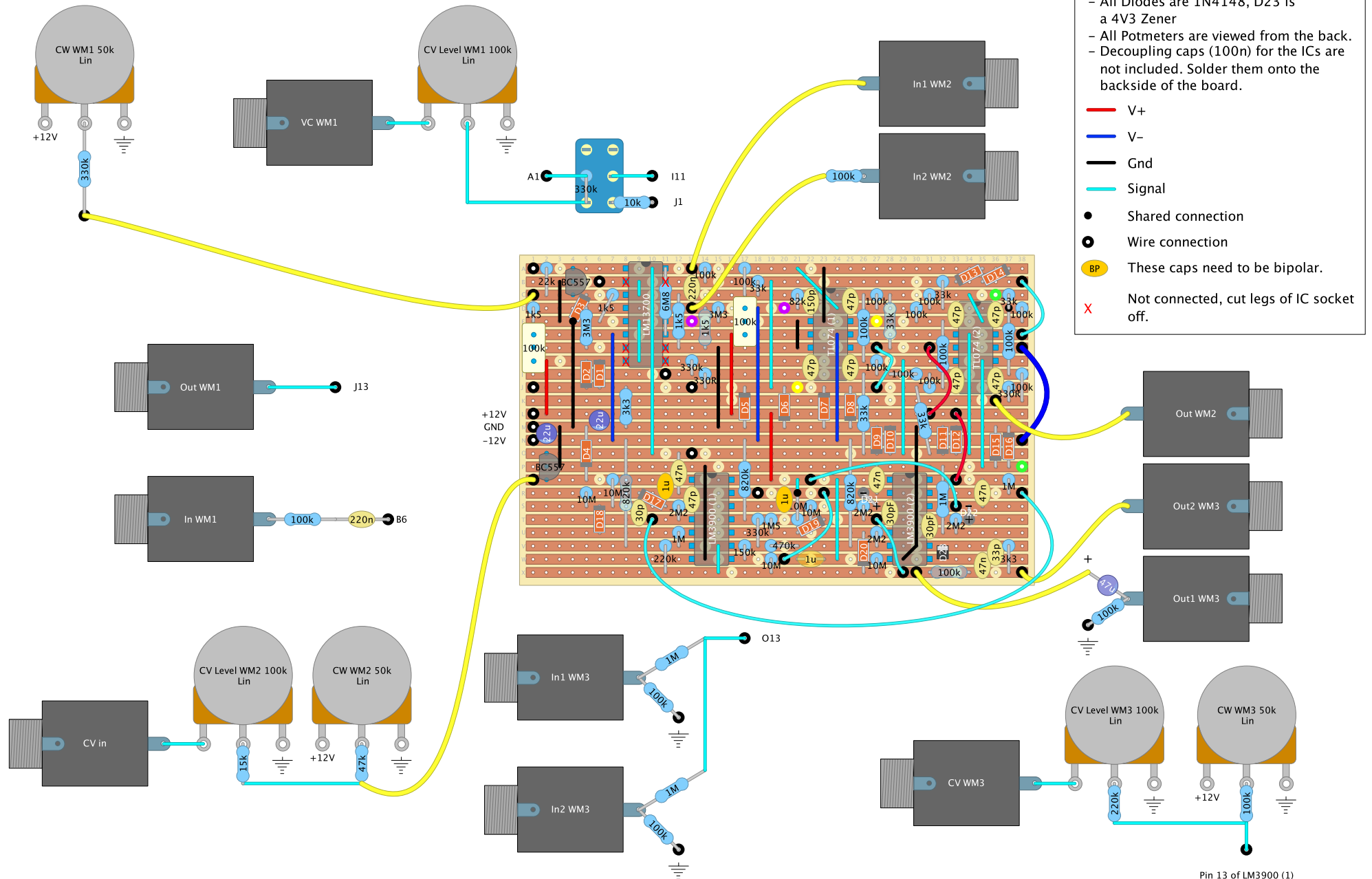


Serge Wave Multipliers

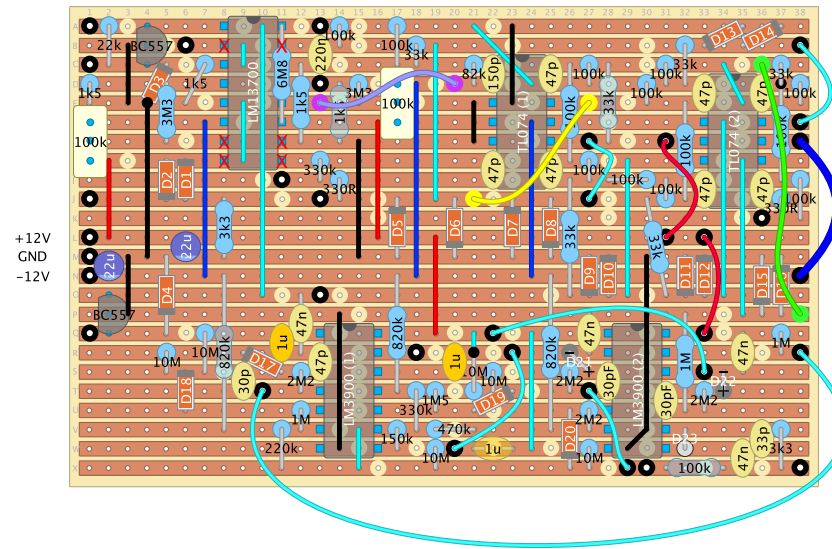
Schematic: Serge Tcherepin, Ken Stone
Stripboard Layout: Markus Möbius
02.02.2022
moebiusynths.com



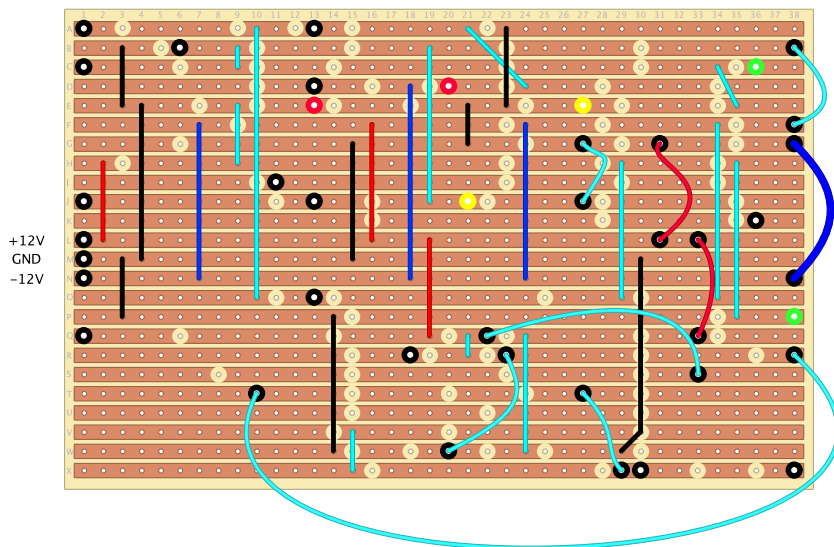
Pin 13 of LM3900 (1)

Serge Wave Multipliers

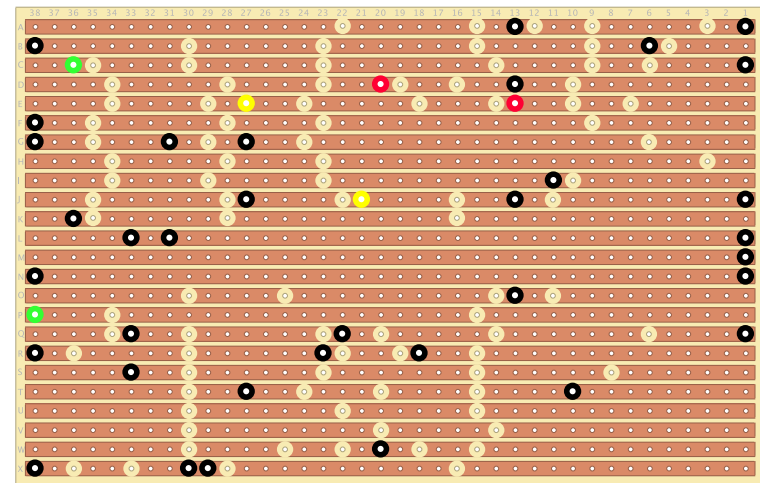
Schematic: Serge Tcherepin, Ken Stone
Stripboard Layout: Markus Möbius
02.02.2022
moebiusynths.com



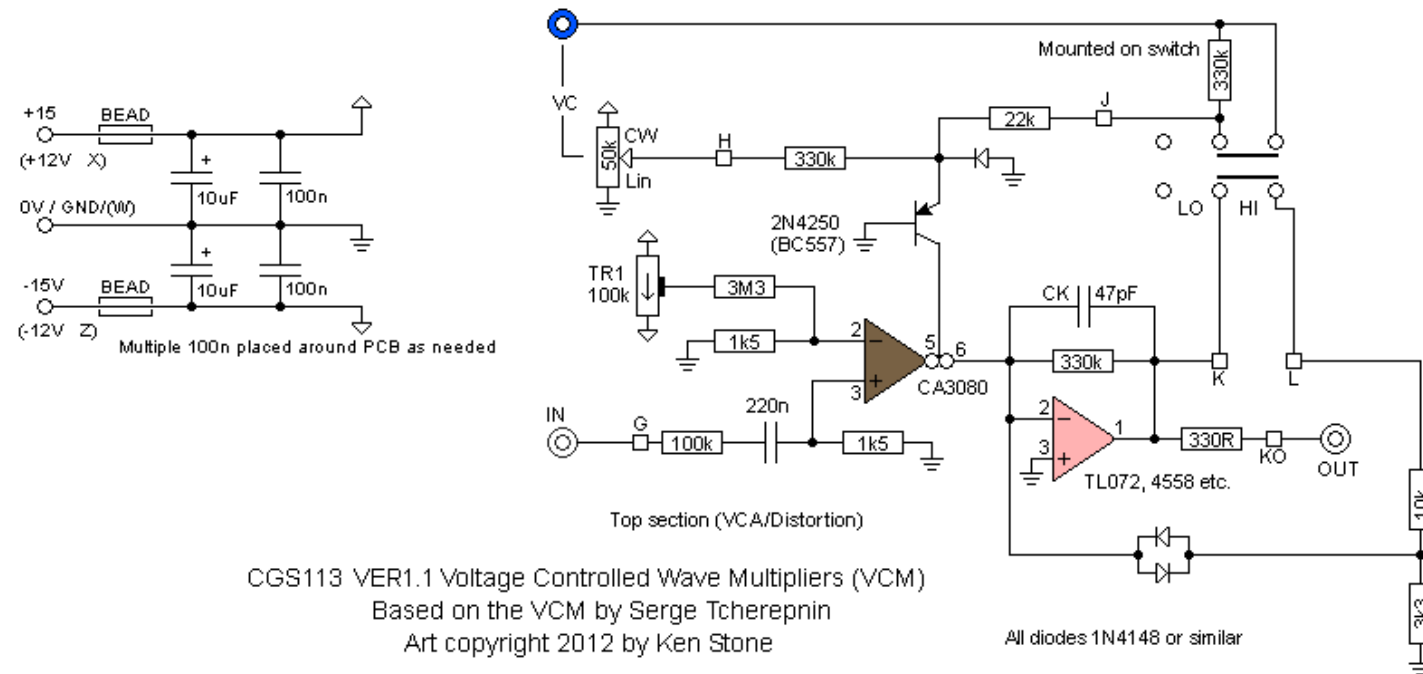
jumpers and line breakers only, viewed from the top



breakers only, viewed from the bottom

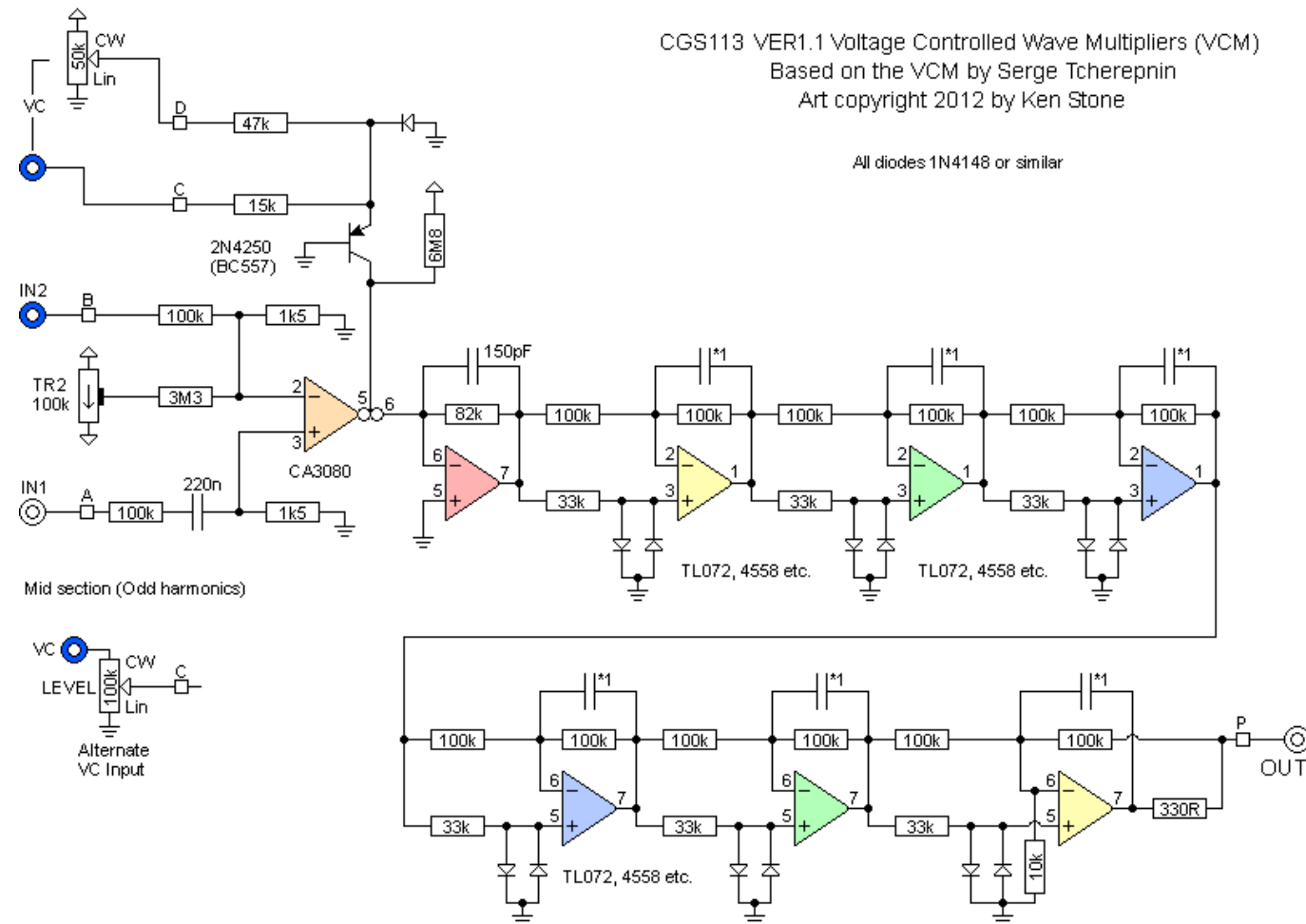


Top Wave Multiplier



Source: https://www.elby-designs.com/webtek/cgs/serge/cgs113/cgs113_vcm.html

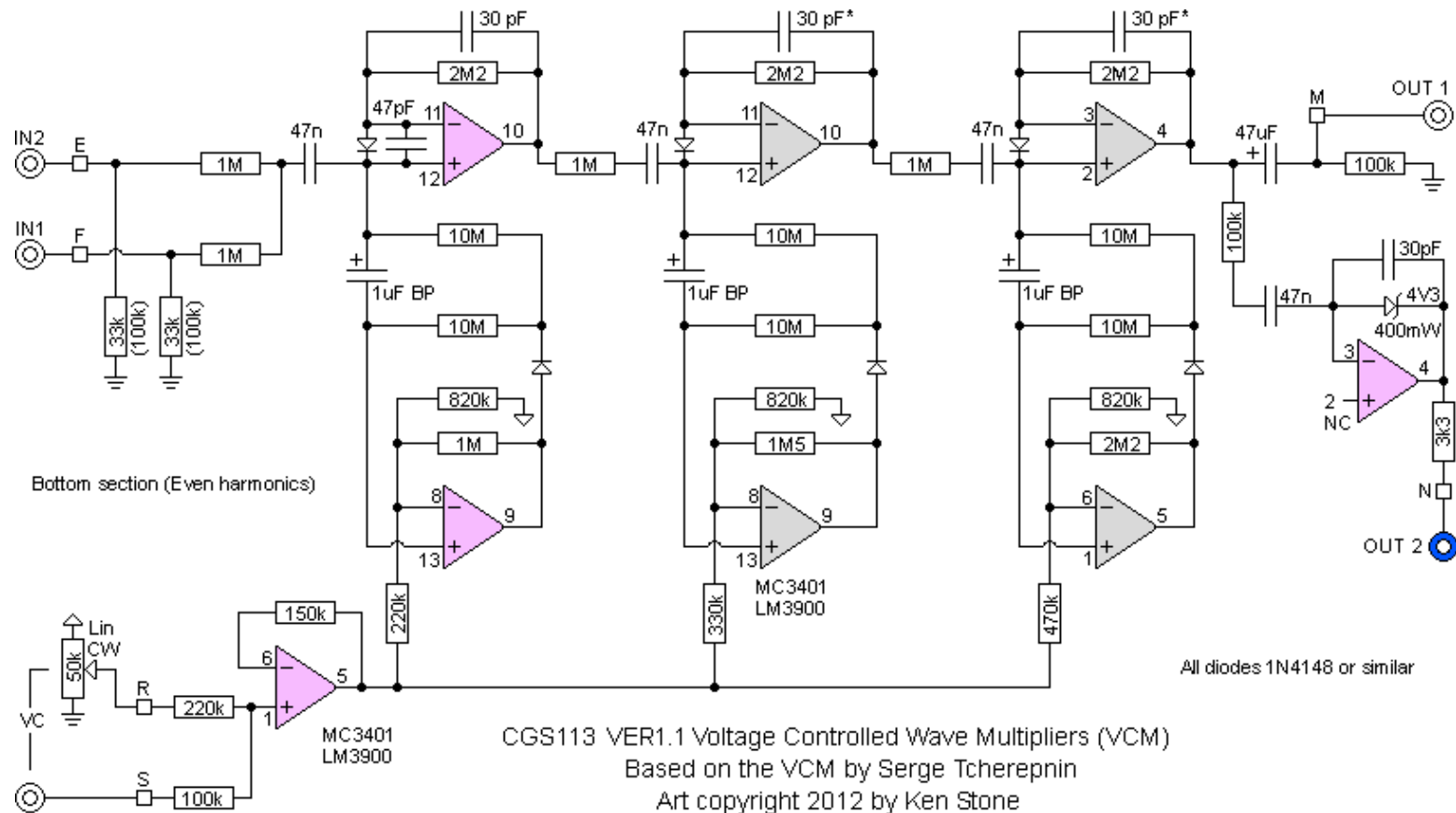
Middle Wave Multiplier



Caps marked with *1 are 47p

Source: https://www.elby-designs.com/webtek/cgs/serge/cgs113/cgs113_vcm.html

Bottom Wave Multiplier



Source: https://www.elby-designs.com/webtek/cgs/serge/cgs113/cgs113_vcm.html

CGS113 - Serge Wave Multiplier Component Kit

Item	Description	Qty	Designator	Package
	CAPACITOR			
1	33pF 5% Ceramic	4		RAD-0.2N
2	47pF 5% Ceramic	8		RAD-0.2N
3	150pF 5% Ceramic	1		RAD-0.2N
4	47nF 63V Polyester	4		RAD-0.2
5	100nF Ceramic	6		RAD-0.2N
6	220nF 63V Polyester	2		RAD-0.2
7	1uF 35V Bipolar Electrolytic	3		RB-D6.3-P2.5
8	10uF 35V Electrolytic	2		RB-D5.0-P2.0
9	47uF Electrolytic	1		RB-D5-P2.5
	CONNECTOR			
10	16-pin IC Socket 0.3inch	1		DIP-16
11	KK396 - 4-way Straight - Locking Header	1		-
12	KK396 - 4-way Crimp Housing	1		3.96MM
13	Crimp - KK396	4		-
14	8-pin IC Socket 0.3inch	6		DIP-8
15	14-pin IC Socket 0.3inch	2		DIP-14
	DIODE			
16	1N4148	22		DIODE-0.3
17	4.7V 5% 500mW	1		DIODE-0.3
	LINEAR			
18	CA3080 - Transconductance Opamp	2		DIP-8
19	LM13700 - Dual OTA	1		DIP-16
20	LM3900 - Quad Norton Amplifier	2		DIP-14
21	TL072 Dual JFET Opamp	4		DIP-8
	INDUCTOR			
22	Ferrite Bead - 0.45uH 7A	2		AXIAL-0.3

CGS113 - Serge Wave Multiplier Component Kit

Item	Description	Qty	Designator	Package
	RESISTOR			
23	330R 1% 0.5W Metal Film	2		AXIAL-0.4
24	1K5 1% 0.5W Metal Film	4		AXIAL-0.4
25	3K3 1% 0.5W Metal Film	2		AXIAL-0.4
26	10K 1% 0.5W Metal Film	2		AXIAL-0.4
27	15K 1% 0.5W Metal Film	1		AXIAL-0.4
28	22K 1% 0.5W Metal Film	1		AXIAL-0.4
29	33K 1% 0.5W Metal Film	6		AXIAL-0.4
30	36K 1% 0.5W Metal Film	2		AXIAL-0.4
31	47K 1% 0.5W Metal Film	1		AXIAL-0.4
32	82K 1% 0.5W Metal Film	1		AXIAL-0.4
33	100K 1% 0.5W Metal Film	20		AXIAL-0.4
34	150K 1% 0.5W Metal Film	1		AXIAL-0.4
35	220K 1% 0.5W Metal Film	2		AXIAL-0.4
36	330K 1% 0.5W Metal Film	4		AXIAL-0.4
37	470K 1% 0.5W Metal Film	1		AXIAL-0.4
38	820K 1% 0.5W Metal Film	3		AXIAL-0.4
39	1M0 1% 0.5W Metal Film	5		AXIAL-0.4
40	1M5 1% 0.5W Metal Film	1		AXIAL-0.4
41	2M2 1% 0.5W Metal Film	4		AXIAL-0.4
42	3M3 1% 0.5W Metal Film	2		AXIAL-0.4
43	6M8 1% 0.5W Metal Film	1		AXIAL-0.4
44	10M 1% 0.5W Metal Film	6		AXIAL-0.4
	TRANSISTOR			
45	BC557B PNP Transistor	2		TO-92
	TRIMPOT			
46	100K 1TV Cermet	2		3306F
	End of document			

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