

Bill Of Materials

=====

Design: TETRODE AMPLIFIER DESIGN SUITE

G1 SUPPLY & HV-G2 SEQUENCER

Doc. no.: Amateur Radio

Revision: 7

Author: flfrv@sfr.fr

Modified: 08/2022

COMMON PARTS FOR ALL G1 BOARDS

QTY	PART-REFS	VALUE	UZ	PACKAGE
---	-----	-----	--	-----
Resistors				

2	R1,R15	1M		0.25 W
0	R2 (OPTIONAL)	0.22		5 W VERTICAL
1	R10	1k		1 W
1	R13	10k		0.25 W
1	R14	2.2k		2 W
1	R20	100k		0.25 W
Capacitors				

1	C1	1uF		PITCH 2.54 (150V)
4	C2,C5,C7,C9	100nF 50V		PITCH 2.54 OR 5.08
1	C4	10nF 2kV		PITCH 5.08 OR 7.62
Integrated Circuits				

1	U1	LM358N		DIL8 + SOCKET
Transistors				

1	Q1	IRF200B211 OR EQUIV		TO220
2	Q2,Q3	BS170		TO92
1	Q4	ZVP3306A OR 4424A		TO92
1	Q6	BC546B		TO92
Diodes				

1	D1	1N4148		DO35
4	D2-D5	1N4007		DO41
2	DZ1,DZ16	BZX79C12	12	DO35 0.5 W
4	DZ2,DZ3,DZ17,DZ18	BZX79C51	51	DO35 0.5 W
1	DZ4	1N5353B	16	DO41 5 W
1	DZ10	BZX79C30	30	DO35 0.5 W
1	DZ19	BZX79C24	24	DO35 0.5 W
Miscellaneous				

1	J4	TERMINAL BLOCK	2 POLES	PITCH 7.62
16	Jx	TERMINAL BLOCK	2 POLES	PITCH 5.08
2	FOR Q5	TERMINAL BLOCK	2 POLES	PITCH 5.08
OR	1 FOR Q5	TERMINAL BLOCK	3 POLES	PITCH 5.08
1	FOR Q5	INSULATING PAD TO220 + BUSHING & M3 BOLT		
3	RL2-RL4	RELAY DIL16 2RT		COIL 24V DC
0	RV1 (OPTIONAL)	1k		POT 1 TURN
1	RV2	1k		POT 1 TURN
1	FU1	0.2A FAST		FUSE 5X20
1	FOR FU1	PROTECTED FUSE HOLDER		5x20



Design: TETRODE AMPLIFIER DESIGN SUITE G1 SUPPLY & HV-G2 SEQUENCER
Revision: 7 VALUES FOR GU-78B OR GU-43B
Author: flfrv@sfr.fr VALUES FOR -120 V / -80 V (-60 V TO -100 V) 25 mA

QTY	PART-REFS	VALUE	UZ	PACKAGE
Resistors				
5	R3-R7	3.3M 3.5kV		0.5 W VR37
2	R8,R9	56k		0.25 W
1	R11	47k		1 W
1	R12	1k		25 W CHASSIS
2	R16,R17	220k		0.5 W
1	R18	1k		25 W CHASSIS
1	R19	100k		0.25 W
Capacitors				
1	C3	270uF 400V		PITCH 10 DIA25
Transistors				
1	Q5	FQP3P20 OR FQP3P50		TO220 + HEATSINK 7.1 °C/W
Diodes				
5	DZ5-DZ9	1N5359B	24	DO41 5 W
Miscellaneous				
1	RL1	DPDT OMRON G2R-2E		COIL 24V DC
1	FU1	FUSE 0.1A		+ HOLDER 5X20
2	RV3,RV4	100k		POT 1 TURN

Design: TETRODE AMPLIFIER DESIGN SUITE G1 SUPPLY & HV-G2 SEQUENCER
Revision: 7 VALUES FOR 2 x QBL5-3500
Author: flfrv@sfr.fr VALUES FOR -215 V / -100V (-85 V TO -130 V) 150 mA

QTY	PART-REFS	VALUE	UZ	PACKAGE
Resistors				
5	R3-R7	6.8M 3.5kV		0.5 W VR37
2	R8,R9	100k		0.25 W
1	R11	100k		2 W
2	R12	1k		50 W CHASSIS
2	R16,R17	330k		0.5 W
3	R18	100		25 W CHASSIS
1	R19	100k		0.25 W
Capacitors				
1	C3	270uF 400V		PITCH 10 DIA25
Transistors				
1	Q5	FQP3P20 OR FQP3P50		TO220 + HEATSINK 2.4 °C/W
Diodes				
5	DZ5-DZ9	1N5367B	43	DO41 5 W
Miscellaneous				
1	RL1	VACUUM RELAY B1B		COIL 24V DC
1	FU1	FUSE 0.3A		+ HOLDER 5X20
2	RV3,RV4	100k		POT 1 TURN

Design: TETRODE AMPLIFIER DESIGN SUITE G1 SUPPLY & HV-G2 SEQUENCER
Revision: 7
Author: flfrv@sfr.fr EXAMPLE VALUES IN RED. ADAPT TO YOUR NEED !
VALUES FOR 4CX-10000 -455V / -310V (-285V TO -350V) 50 mA

QTY	PART-REFS	VALUE	UZ	PACKAGE
Resistors				
5	R3-R7	6.8M 3.5kV		0.5 W VR37
2	R8,R9	82k		0.25 W
1	R11	220k		2 W
1	R12	2.7k		50 W CHASSIS
2	R16,R17	1M >500V		0.5 W (VR37)
3	R18	1k		25 W CHASSIS
1	R19	82k		0.25 W
Capacitors				
2	C3,C6	270uF 400V		PITCH 10 DIA25
Transistors				
1	Q5	FQP3P50		TO220 + HEATSINK 2.4 °C/W
Diodes				
5	DZ5-DZ9	1N5377B	91	DO41 5 W
Miscellaneous				
1	FU1	FUSE 0.1A		+ HOLDER 5X20
1	RL1	VACUUM RELAY B1B		COIL 24V DC
2	RV3,RV4	50k		POT 1 TURN
