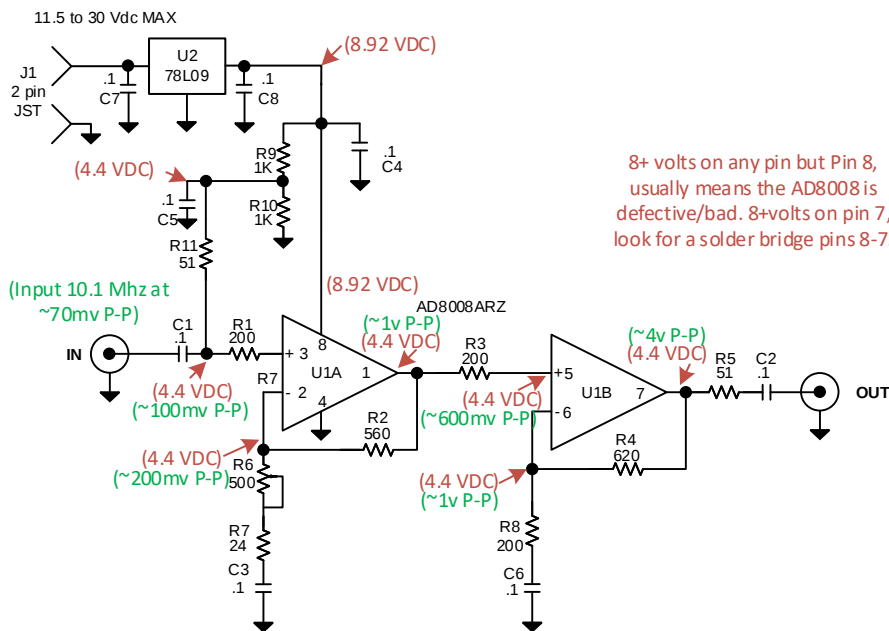
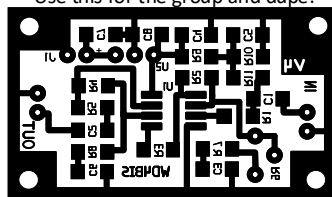




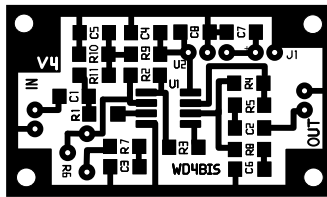
8+ volts on any pin but Pin 8, usually means the AD8008 is defective/bad. 8+volts on pin 7, look for a solder bridge pins 8-7.

Had one Amp with a "Jumpy" output. Replaced U1 with same result. Replaced C3, C6, and C2. Seemed to fix. Burning in

Artwork, Flipped horizontal with drawn text.
Use this for the group and dupe.

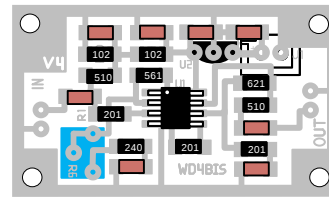


Artwork, sized 1206 SM components 1.7"x 1"



All components with the exceptions of J1, R6, and U2 mounted on the copper side of the board

Component Placement

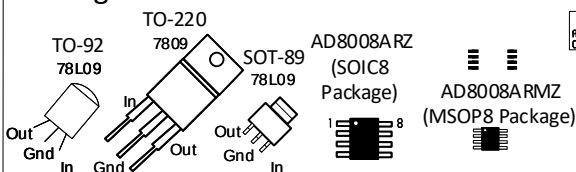


Parts List

- 2, 1000 Ω (102)
- 2, 51 Ω (510)
- 3, 200 Ω (201)
- 1, 24 Ω (240)
- 1, 560 Ω (561)
- 1, 620 Ω (621)
- 1, 500 Ω ¼" pot
- 8, .1uf 50V cap
- 1, AD8008ARZ (SOIC 8 Package)
- 1, 78L09 (TO-92 Package)
- 1, 2 Pin, .1" JST Male
- 1, 2 Pin .1" JST female pigtail
- 2, BNC Female PC Mount

Date:	Revision/Addition/ Note	By:
Dec 9, 2018	Initial Drawing	GSC
Dec 9, 2018	Squeezing some space out of the version 3. Trying to make smaller.	GSC
Dec 9, 2018	My preferred SM Capacitor/Resistor size is 1206.	GSC
	Resistor tolerance and wattage size preferred is 1/4w, 5%	GSC
Dec 11, 2018	Ver 4.1, changed RC components to next size down, 0805	GSC
	Ver 4.2, pulled more space out of the design.	
	Ver 4.3, First attempt at using a surface mount 4MM Pot (R6).	
Dec 13, 2018	Artwork proved out Ver 4.1, 4.2, 4.3. Used TO-92 78L09 voltage regulator.	GSC
	Can be run off of external 9V if a jumper is added V IN to V Out.	

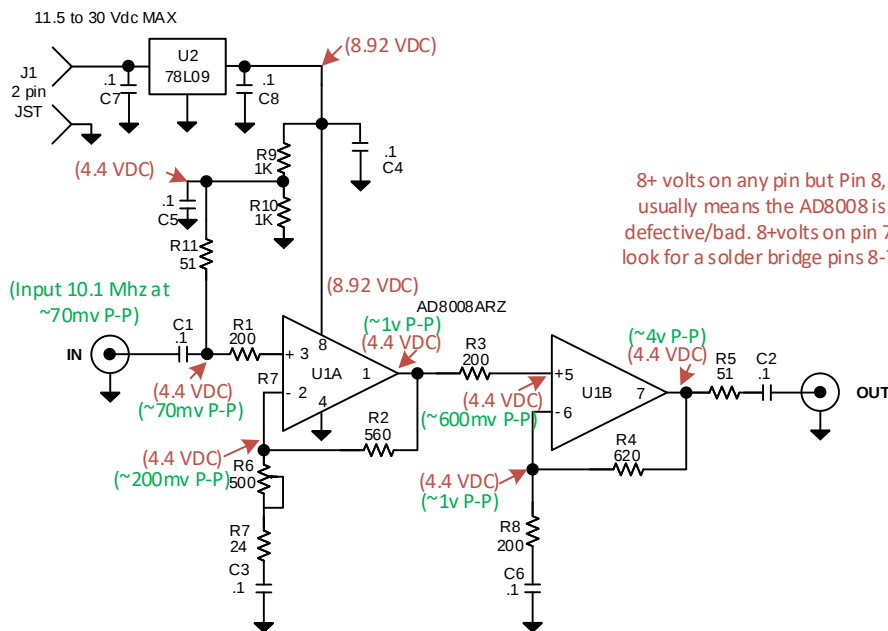
Package Outlines



Drawn Text
ABCDEFGHIJKLMNOPQRSTUVWXYZ
001122334455667788 / + - . IN OUT WD4BIS

Print
Check
.5"x.5"

Drawn By: Gerald Crenshaw WD4BIS	Date: Dec. 9, 2018	From the bench of: Amateur Radio Station WD4BIS	Page 1 of 1
Designed By: Gerald Crenshaw WD4BIS	Date: Dec. 9, 2018	Title: Broadband Amp V4.	Scale:
Checked By: Janet Crenshaw WB9ZPH	Date: Dec. 9, 2018		

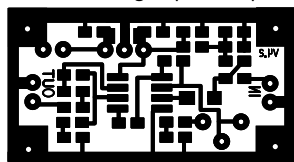


8+ volts on any pin but Pin 8, usually means the AD8008 is defective/bad. 8+volts on pin 7, look for a solder bridge pins 8-7.

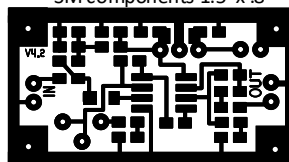
Had one Amp with a "Jumpy" output. Replaced U1 with same result. Replaced C3, C6, and C2. Seemed to fix. Burning in

Had a second Amp with a "Jumpy" output. This time tried replacing components one at a time. Replaced C6 and it helped then replaced C2. Seemed to fix. Burning in

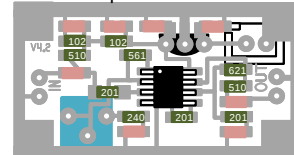
Artwork, Flipped horizontal with drawn text. Use this for the group and dupe.



Artwork Ver 4.2, sized for 0806 SM components 1.5" x .8"

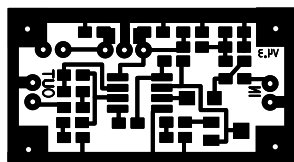


Component Placement

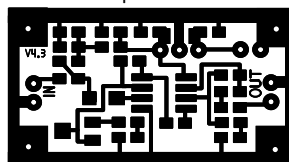


All components with the exceptions of J1, R6, and U2 mounted on the copper side of the board

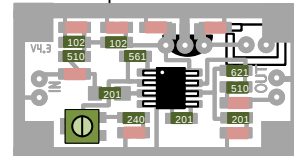
Artwork, Flipped horizontal with drawn text. Use this for the group and dupe.



Artwork Ver 4.3, sized for 0806 SM components 1.5" x .8"



Component Placement



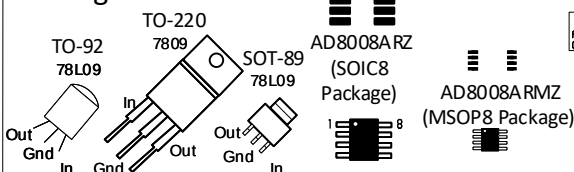
All components with the exceptions of J1, and U2 mounted on the copper side of the board

Parts List

- 2, 1000 Ω (102)
- 2, 51 Ω (510)
- 3, 200 Ω (201)
- 1, 24 Ω (240)
- 1, 560 Ω (561)
- 1, 620 Ω (621)
- 1, 500 Ω 1/4" pot
- 8, .1uf 50V cap
- 1, AD8008ARZ (SOIC 8 Package)
- 1, 78L09 (TO-92 Package)
- 1, 2 Pin, .1" JST Male
- 1, 2 Pin .1" JST female pigtail
- 2, BNC Female PC Mount

Date:	Revision/Addition/ Note	By:
Dec 9, 2018	Initial Drawing	GSC
Dec 9, 2018	Squeezing some space out of the version 3. Trying to make smaller.	GSC
Dec 9, 2018	My preferred SM Capacitor/Resistor size is 1206. Resistor tolerance and wattage size preferred is 1/4w, 5%	GSC
Dec 11, 2018	Ver 4.1, changed RC components to next size down, 0805, 1/8W 5% Ver 4.2, pulled more space out of the design. Ver 4.3, First attempt at using a surface mount 4MM Pot (R6). These versions are too small to add component text to board.	GSC
Dec 13, 2018	Artwork proved out Ver 4.2, 4.3. Used TO-92 78L09 voltage regulator. Can be run off of external 9V if a jumper is added V IN to V Out.	GSC

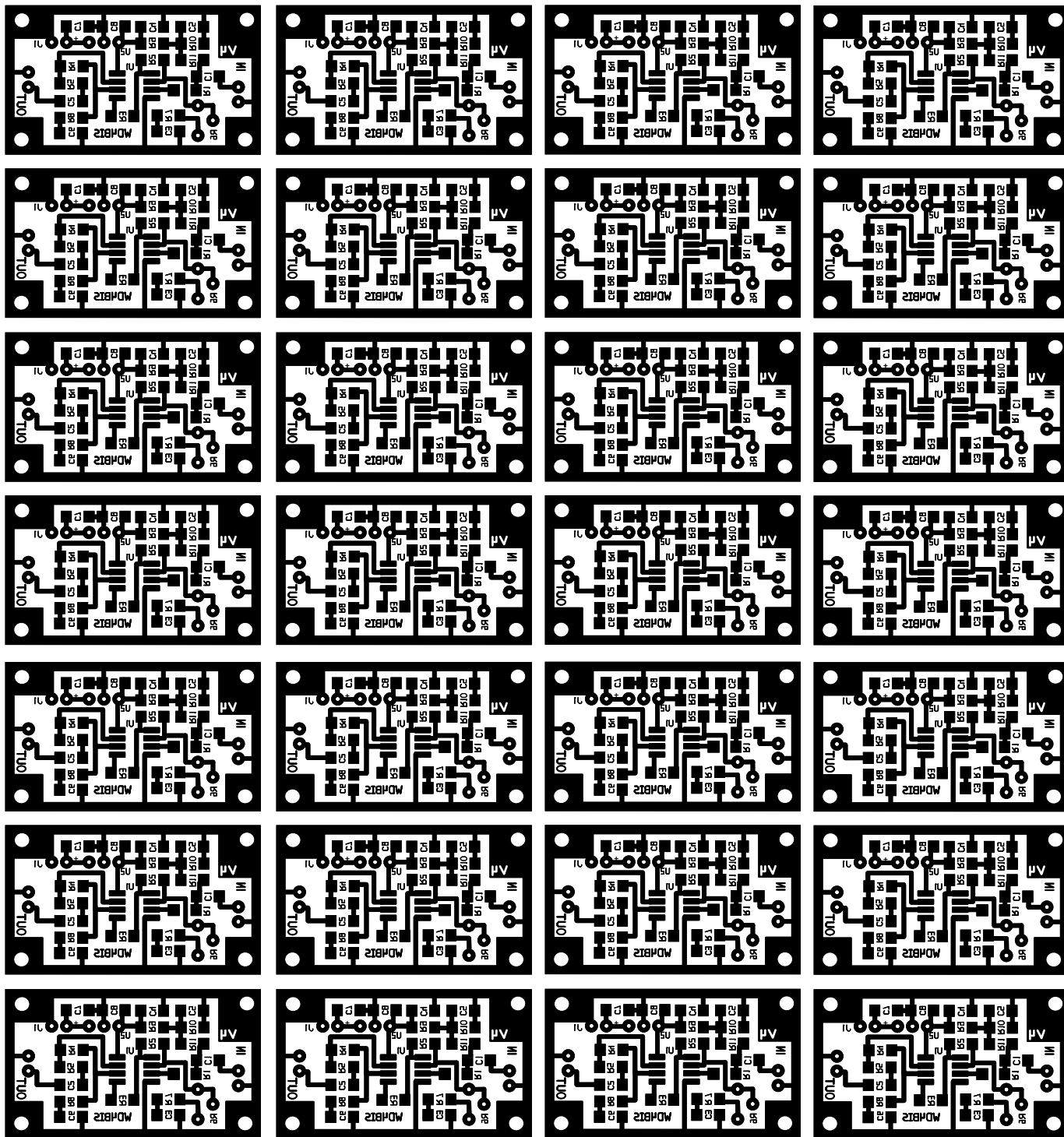
Package Outlines



Drawn Text
ABCDEFGHIJKLMNOPQRSTUVWXYZ
001122334455667788 / + - . IN OUT WD RB

Print
Check
.5"x.5"

Drawn By: Gerald Crenshaw WD4BIS	Date: Dec. 9, 2018	From the bench of: Amateur Radio Station WD4BIS	Page 1 of 1
Designed By: Gerald Crenshaw WD4BIS	Date: Dec. 9, 2018	Title: Broadband Amp V4.2, V4.3	Scale:
Checked By: Janet Crenshaw WB9ZPH	Date: Dec. 9, 2018		



Date:	Revision/Addition/ Note	By:
Dec 13, 2018	Initial Drawing	GSC
Dec 13, 2018	Version 4, uses 1206 sized SM componets	GSC

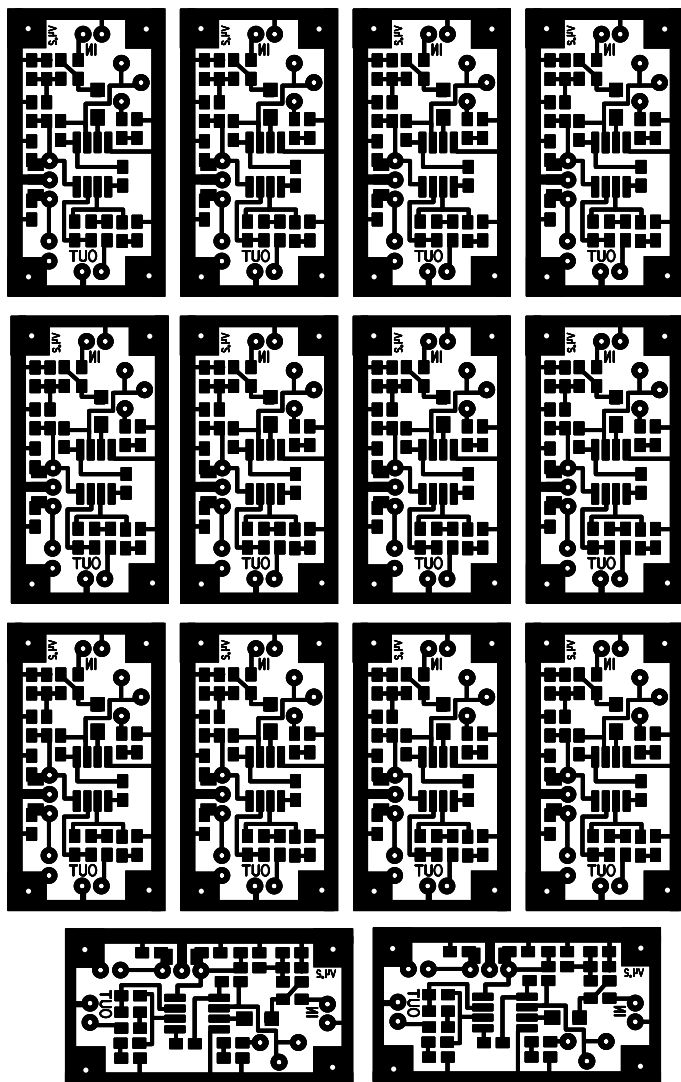
Drawn By:	Gerald Crenshaw WD4BIS	Date:	Dec. 13, 2018
Designed By:	Gerald Crenshaw WD4BIS	Date:	Dec. 13, 2018
Checked By:	Janet Crenshaw WB9ZPH	Date:	Dec. 13, 2018

Print to HP Laserjet P3005, Staples Color Laser Paper, SKU 633215
 Paper/Quality Pro Res 1200 DPI
 Heat press, 300 degrees F for 150 seconds. (2.5 min.)

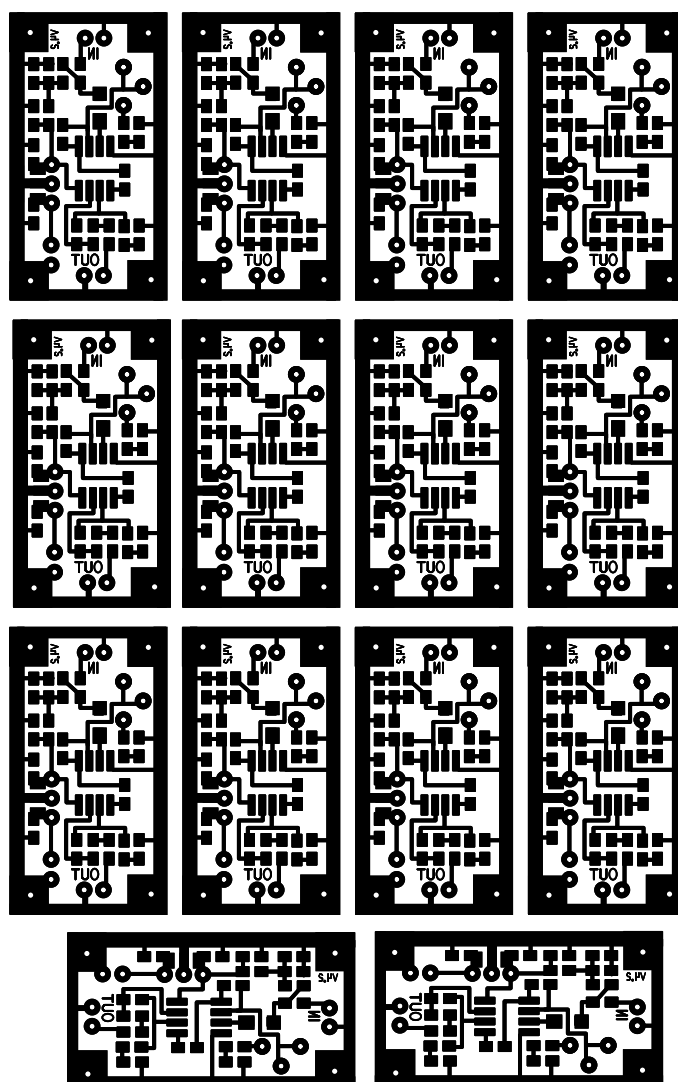
Drawn Text
 DEFQHIJKLMNOPQRSTUVWXYZ
 229456789 /+-. IMOUTWOPBIS

Print
 Check
 .5"x.5"

From the bench of:	Page 1
Amateur Radio Station WD4BIS	of 1
Title:	Scale:
Group and Dupe Broadband Amp V4	



Version 4.2 with 0805 component's, standard pot.



Version 4.2 with 0805 component's, standard pot.

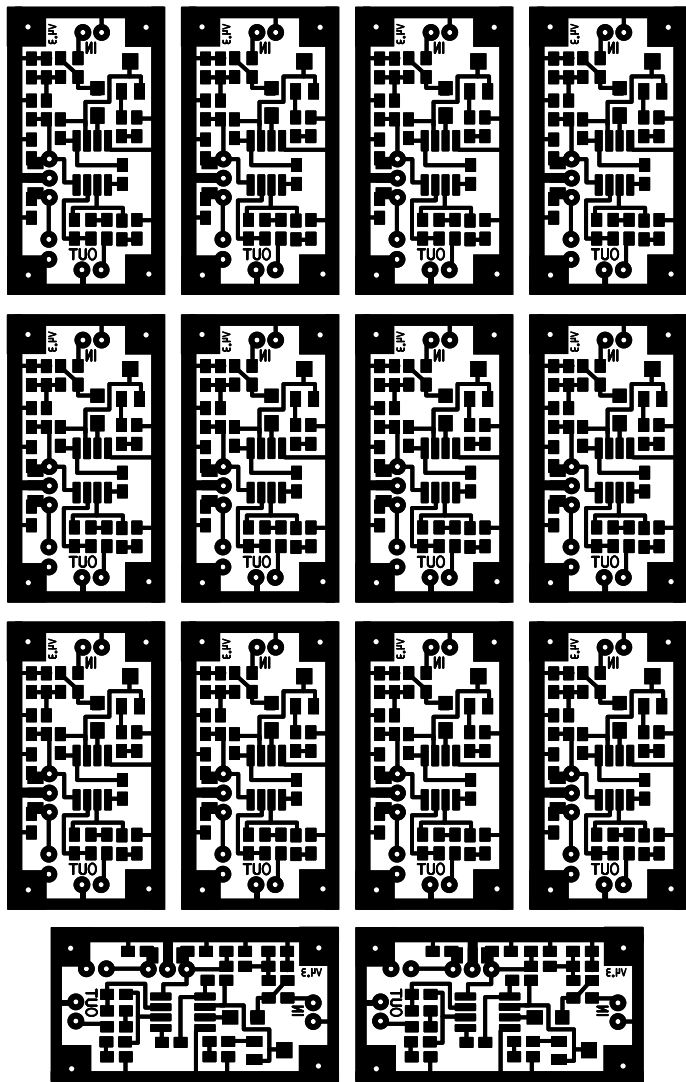
Date:	Revision/Addition/ Note	By:
Dec 13, 2018	Initial Drawing	GSC
Dec 13, 2018	Version 4.2 Uses 0805 sized components, standard pot for R6	GSC
Jan 27, 2019	Re-arranged the dupes to squeeze as many as I could on a 4"x6" copper blank.	GSC

Drawn Text
DEFULT:JUNIORPQRSTUWXYZ
22468789 /+-- ,~\OUTM@BIS

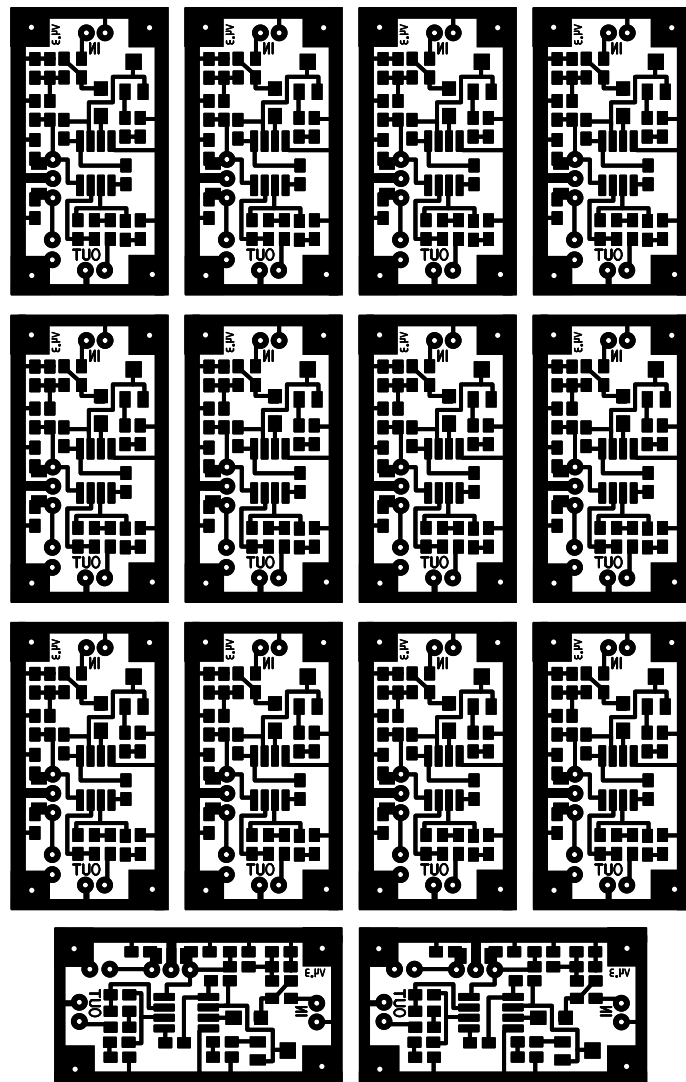
Print
Check
.5"x.5"

Print to HP Laserjet P3005, Staples Color Laser Paper, SKU 633215
Paper/Quality Pro Res 1200 DPI
Heat press, 300 degrees F for 150 seconds. (2.5 min.)

Drawn By: Gerald Crenshaw WD4BIS	Date: Dec. 13, 2018	From the bench of: Amateur Radio Station WD4BIS	Page 1 of 1
Designed By: Gerald Crenshaw WD4BIS	Date: Dec. 13, 2018	Title: Group and Dupe Broadband Amp V4.2	Scale:
Checked By: Janet Crenshaw WB9ZPH	Date: Dec. 13, 2018		



Version 4.3 with 0805 size componets SM pot.



Version 4.3 with 0805 size componets SM pot.

Date:	Revision/Addition/ Note	By:
Dec 13, 2018	Initial Drawing	GSC
Dec 13, 2018	Version 4.3, uses 0805 sized SM componets and R6 is a SM pot.	GSC
Jan 27, 2019	Re-arranged the dupes to squeeze as many as I could on a 4"x6" copper blank.	GSC

Drawn	Gerald Crenshaw WD4BIS	Date: Dec. 13, 2018
By:		
Designed	Gerald Crenshaw WD4BIS	Date: Dec. 13, 2018
By:		
Checked	Janet Crenshaw WB9ZPH	Date: Dec. 13, 2018
By:		

Drawn Text
DEFHITJLKNOPQRSTUVWXYZ
22966789 /+-.,IMOUTW0NBIS

Print
Check
.5"x.5"

Printto HP LaserjetP3005, Staples Color Laser Paper, SKU 633215
Paper/Quality Pro Res 1200 DPI
Heat press, 300 degrees F for 150 seconds. (2.5 min.)

From the bench of:	Page 1
Amateur Radio Station WD4BIS	of 1
Title: Group and Dupe Broadband Amp V4.3	Scale: