Appendix B
Printed Circuit Board Artwork

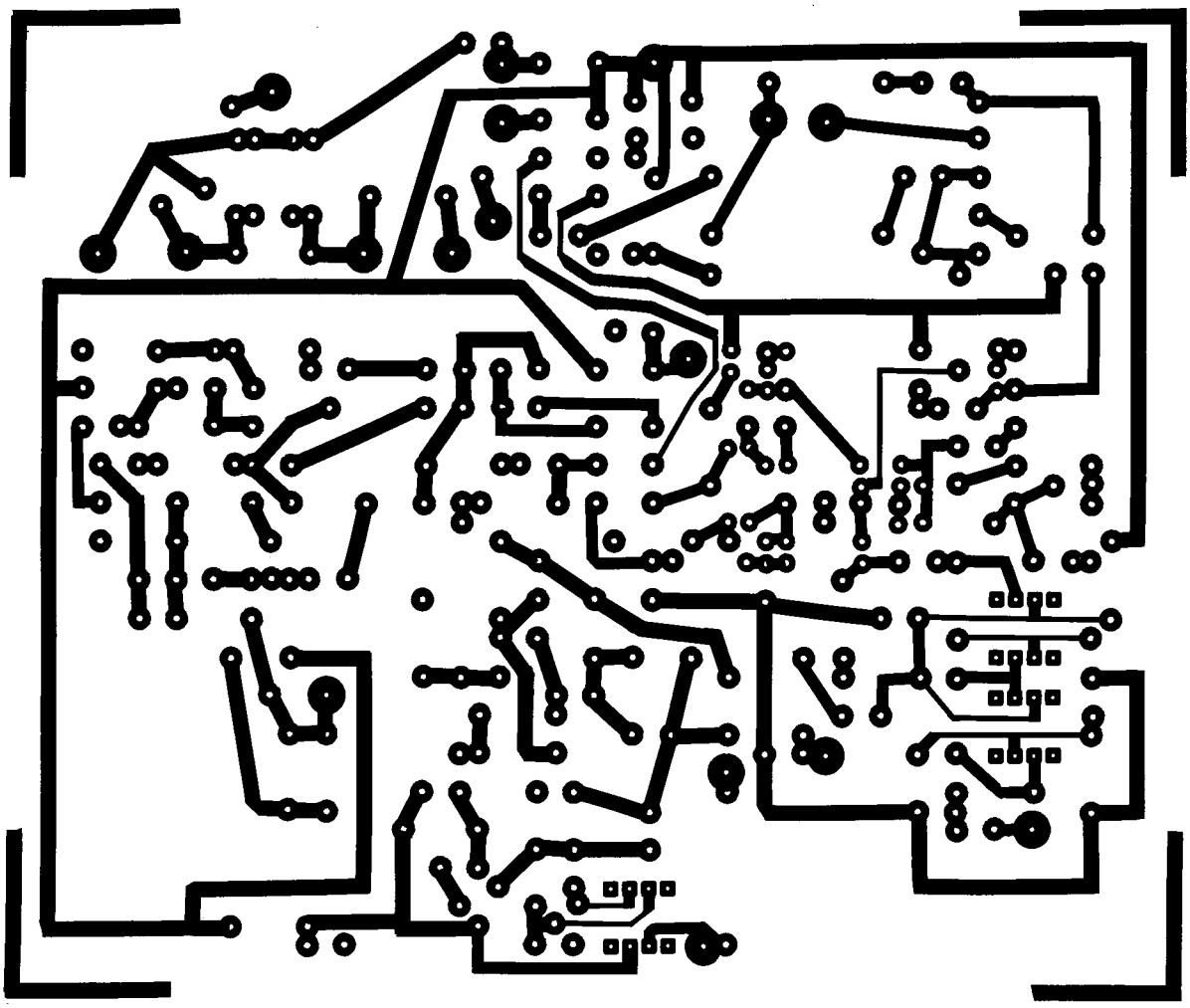

Fig 7.45: 1.8MHz QRP transceiver PCB layout

IMPORTANT NOTICE

Whilst every effort has been made to ensure that the artwork in this appendix is displayed accurately, it is the responsibilty of the reader to check that he/she is using the correct drawing, that it is accurate and the correct size (some may need re-scaling on a photcopier) and whether the artwork is 'mirror image'.It is important to read the associated text in the relevant chapter.

The RSGB cannot be held responsible for any errors or consequential losses incurred by the use of this artwork.

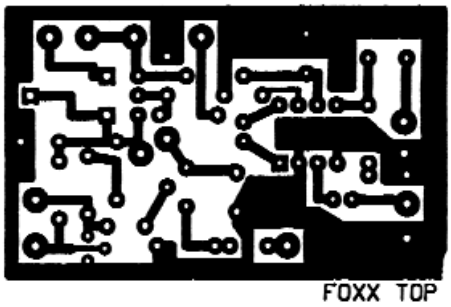

Fig 7.52: FOXX2 PCB layout

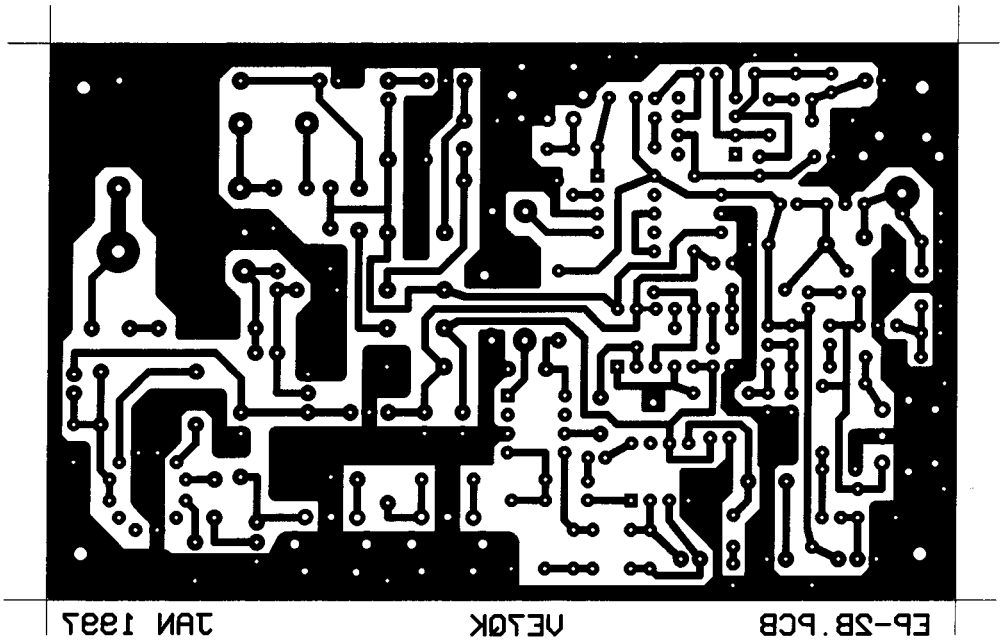

Fig 7.58: Epiphyte-2 PCB layout. This image is reversed

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

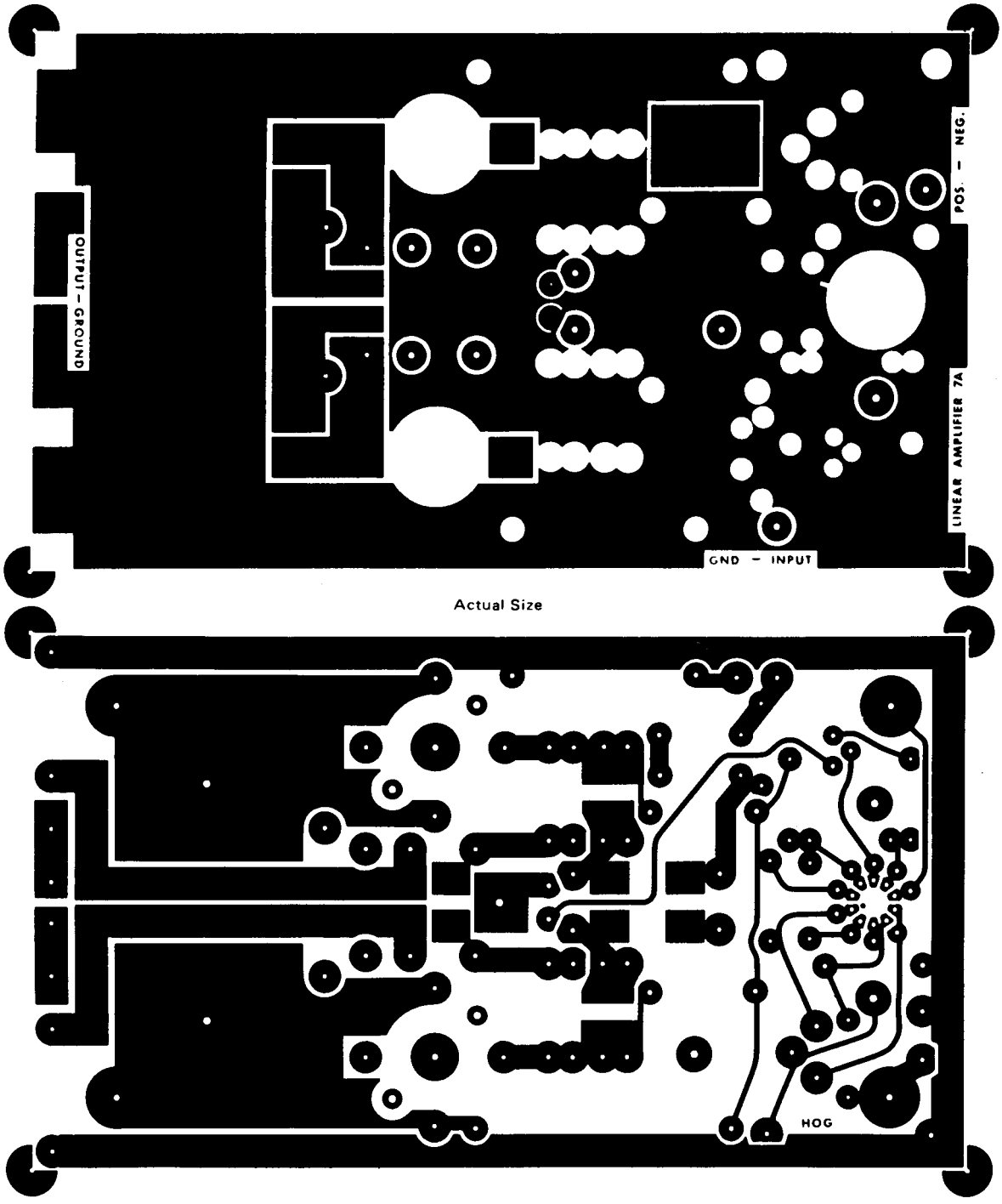

Fig 7.66: The PCB layouts for the 140-300W amplifiers (Motorola)

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

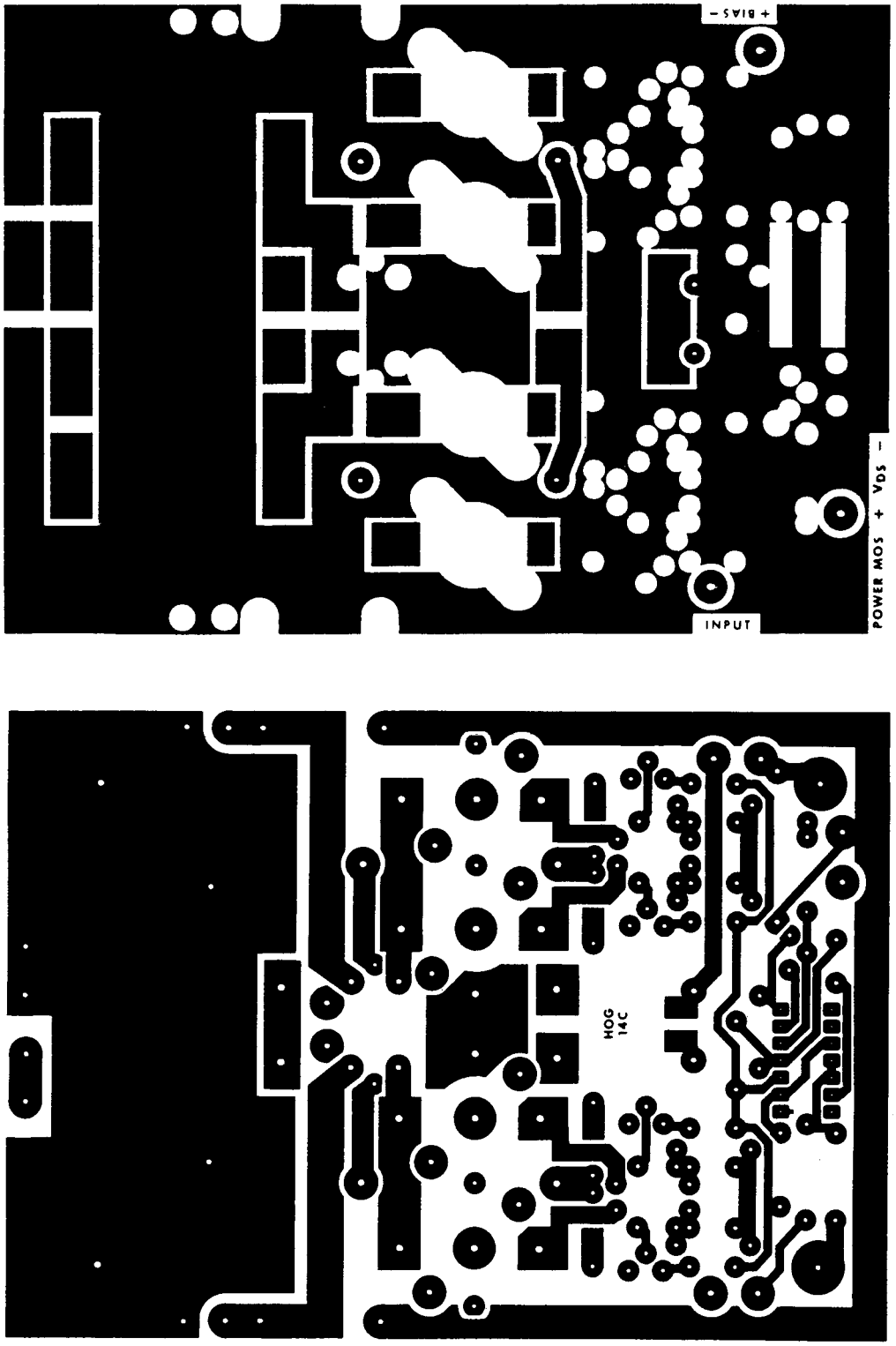

Fig 7.73: PCB layouts for the 600W amplifier (Motorola)

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

NOTE: Fig 8.8 is shown overleaf >>>>>>>>>>>>>>

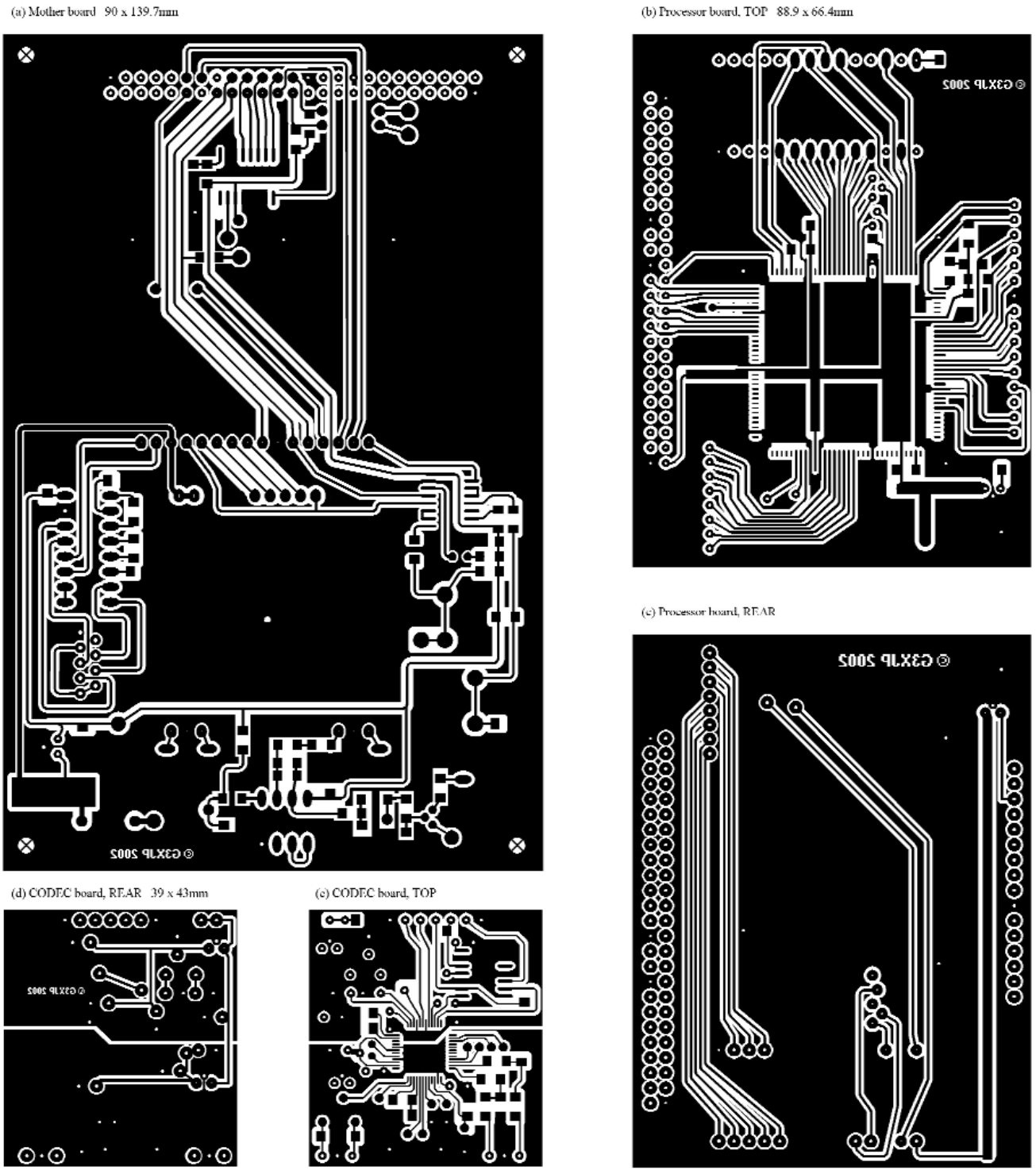

Fig 8.20: DSP boards PCB artwork. NB all these images are mirrored for direct copying to laser film. Should you wish to use an indelible pen to apply the artwork to the back of the daughter boards, the image needs to be flipped (or simply viewed in a mirror). All holes are 0.7mm

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

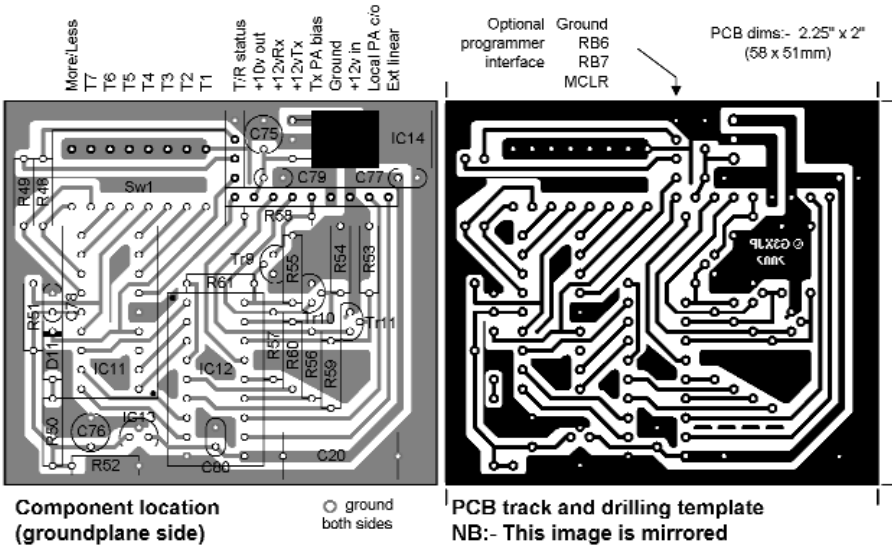

Fig 8.8: Timer board PCB - with the component side unetched. Countersink the ungrounded holes on the component side. The input/output connector (if any) is not specified, but is 0.1in pitch. The author used SIL plug/socket strip for this and all arbitrary connectors

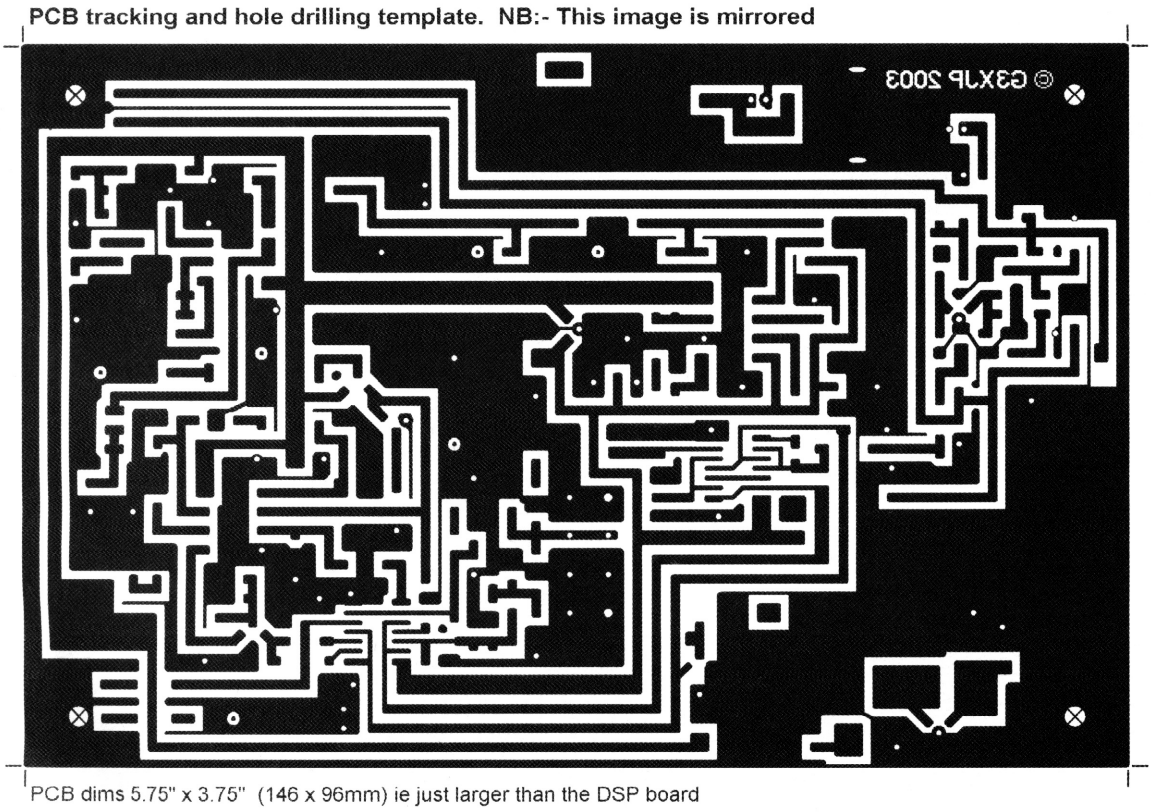

Fig 8.24(b): The IF board

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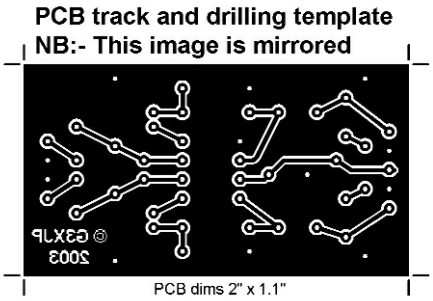


Fig 8.35: Stereo amplifier PCB track and drilling template. NB: This image is reversed

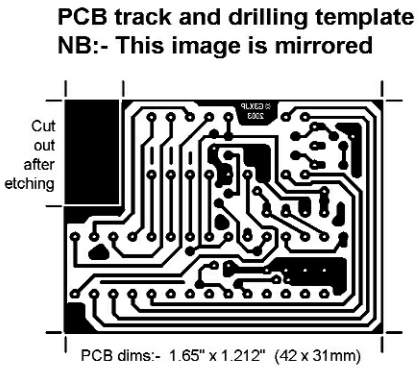


Fig 8.37: PicAdapter board PCB track and drilling template. NB: This image is reversed

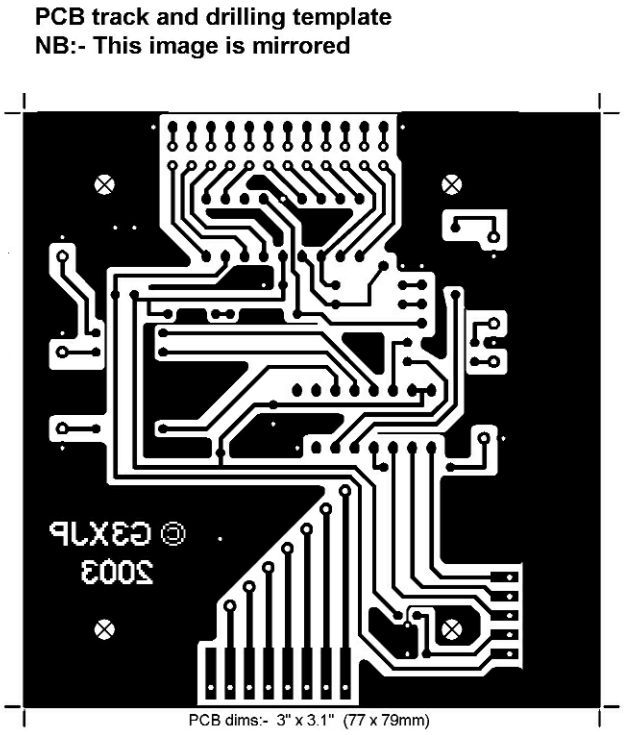


Fig 8.39: Status Board PCB track and drilling template. NB: This image is reversed

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

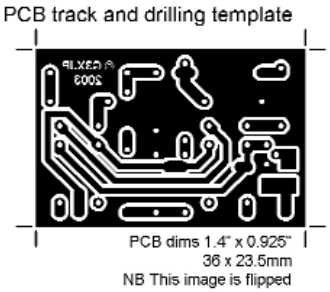


Fig 8.41(b): Injection filter PCB track and drilling template

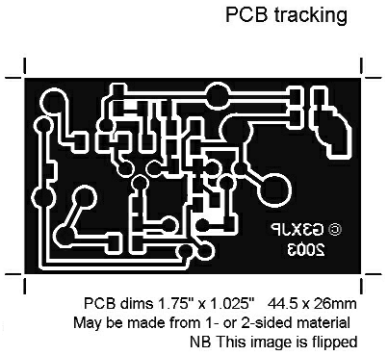


Fig 8.43(b): Reference oscillator PCB

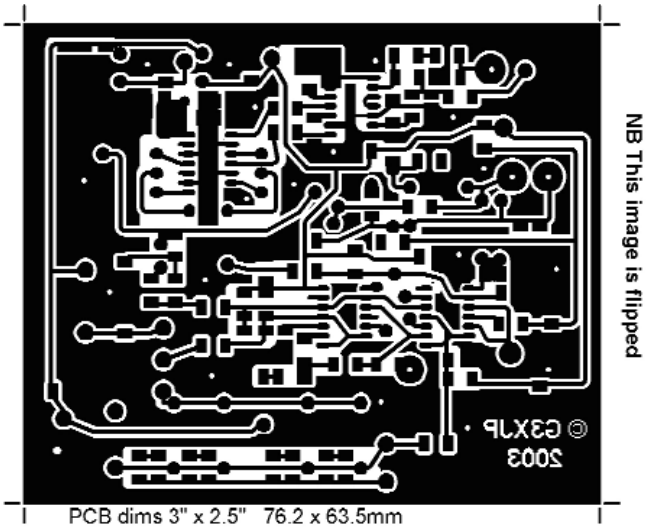
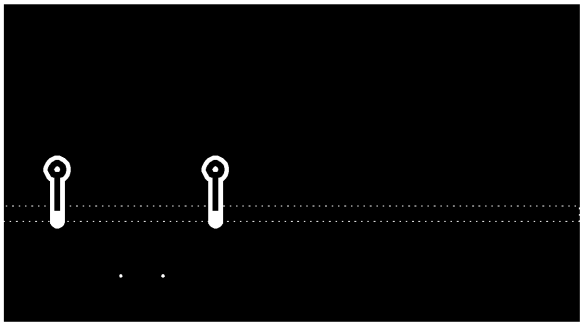


Fig 8.55: 'Magic Roundabout' PCB artwork

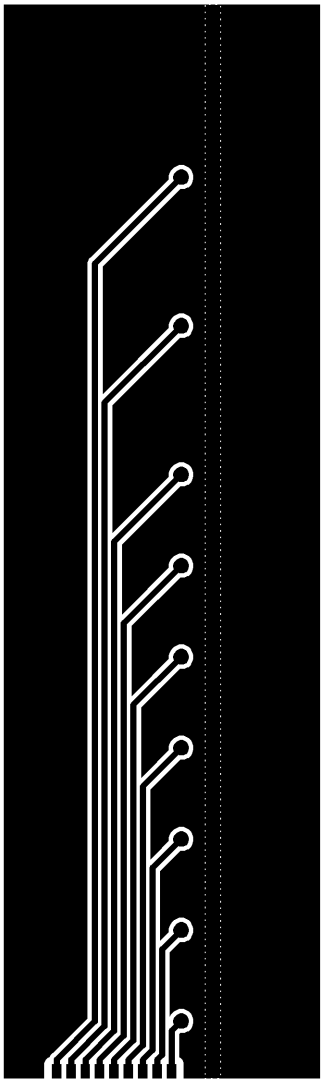
Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

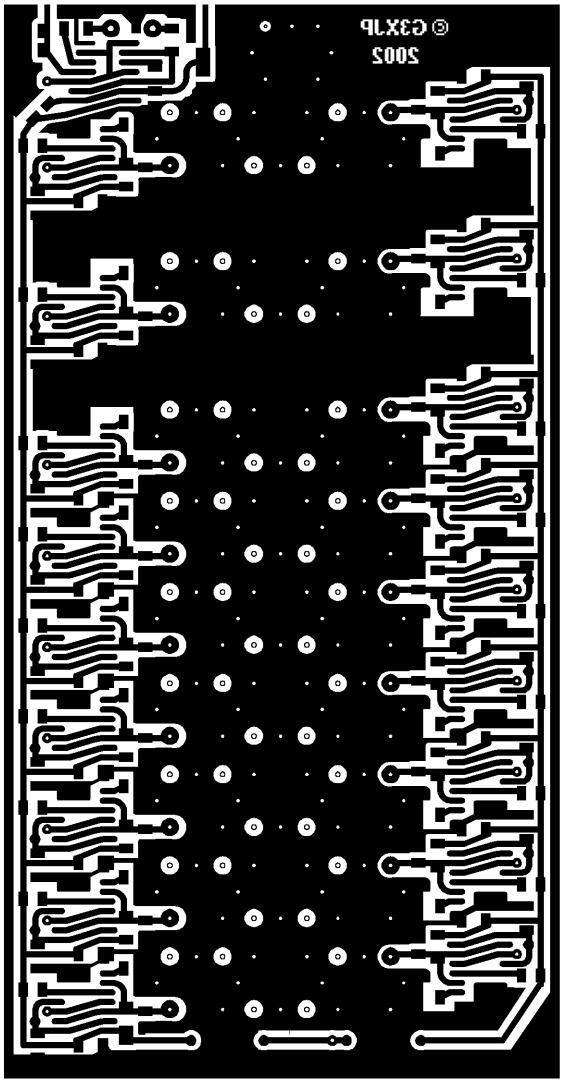
Fig 8.61: Band-pass filters. PCB layout for nine filter blocks

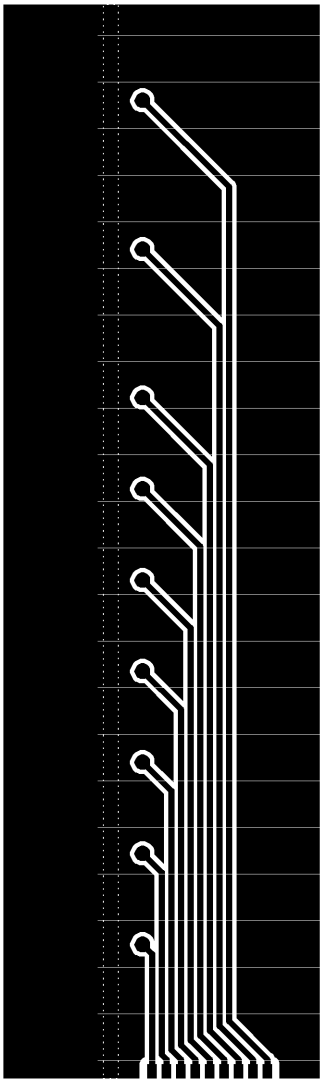


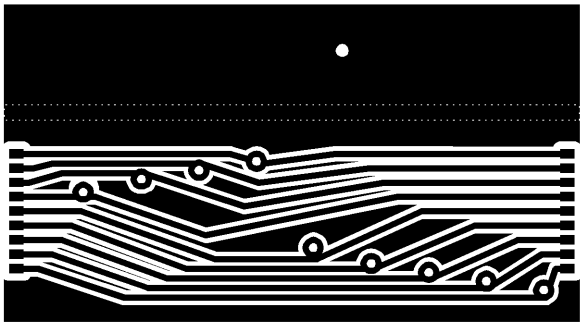
PCB dims:-
Filter board 2.90" x 5.60"
Side plates 1.65" x 5.60"
End plates 3.00" x 1.65"
Complete assembly:-
3" x 1.65" x 5.757"
assuming 2mm thick PCB

NB This image is mirrored









Drill these holes for tight fit on 1206 resistors

Drill several holes (not shown) through each side- and end-plate - and intimately connect the inner and outer grounded faces.

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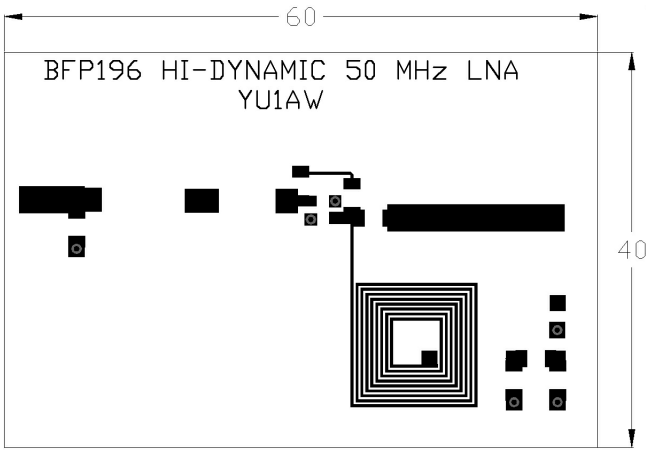

Fig 9.36: PCB layout for the 6m low noise preamplifier. The illustration should be re-scaled as shown

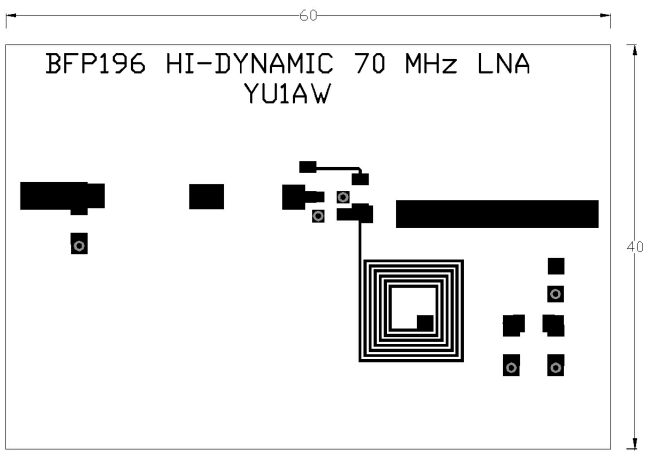

Fig 9.37: PCB layout for the 4m low noise preamplifier. The illustration should be re-scaled as shown

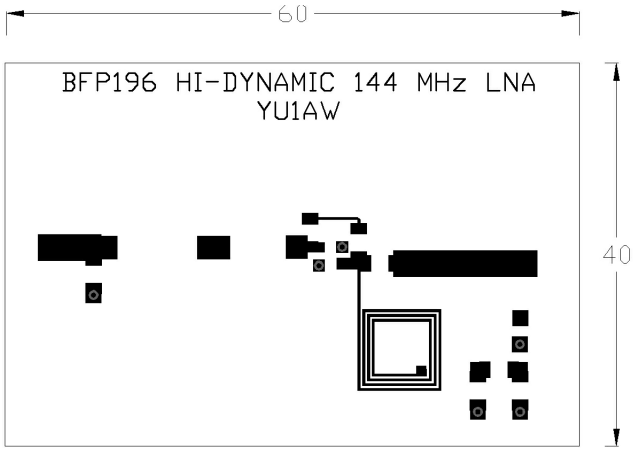

Fig 9.38: PCB layout for the 2m low noise preamplifier. The illustration should be re-scaled as shown

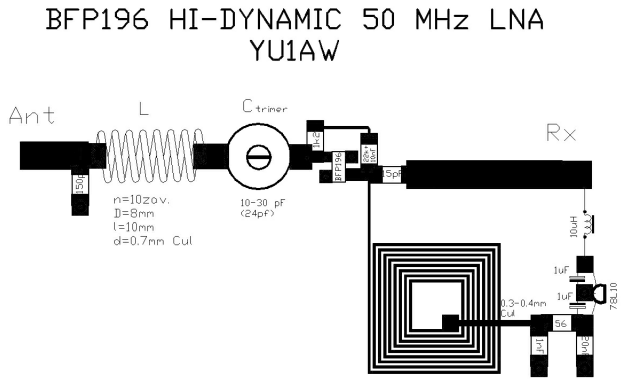

Fig 9.46: Component layout for the 6m low noise preamplifier

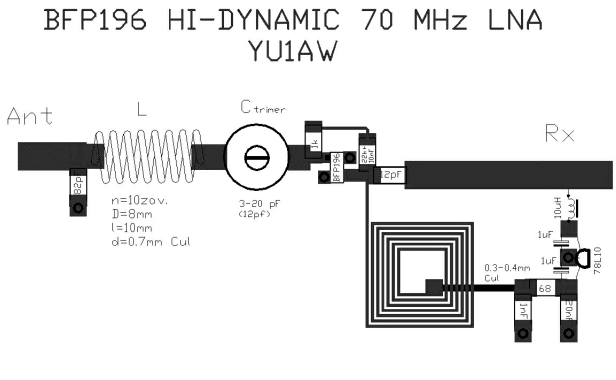

Fig 9.47: Component layout for the 4m low noise preamplifier

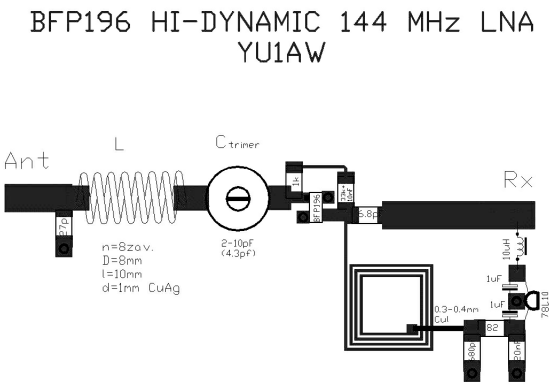

Fig 9.48: Component layout for the 2m low noise preamplifier

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

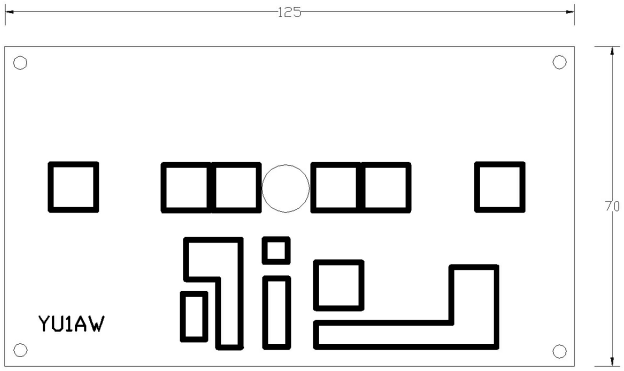

Fig 9. 72: PCB layout for the one transistor power amplifier. The illustration should be re-scaled as shown

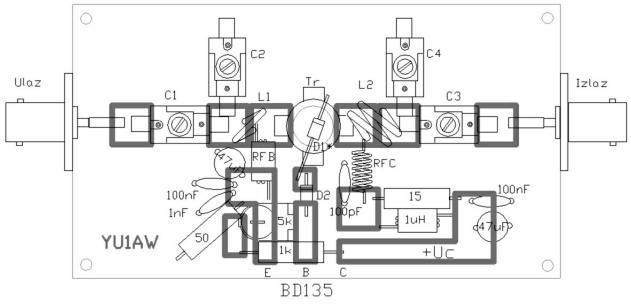

Fig 9.73: Component layout for the one transistor power amplifier

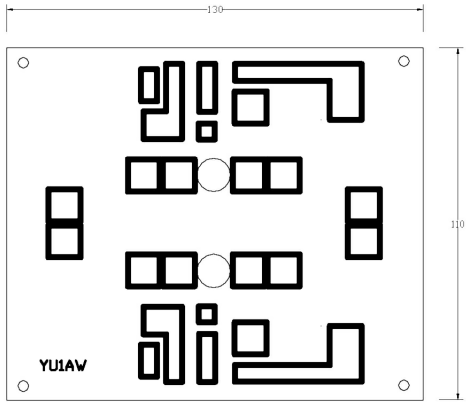

Fig 9.76: PCB layout for the two transistor power amplifier. The illustration should be re-scaled as shown

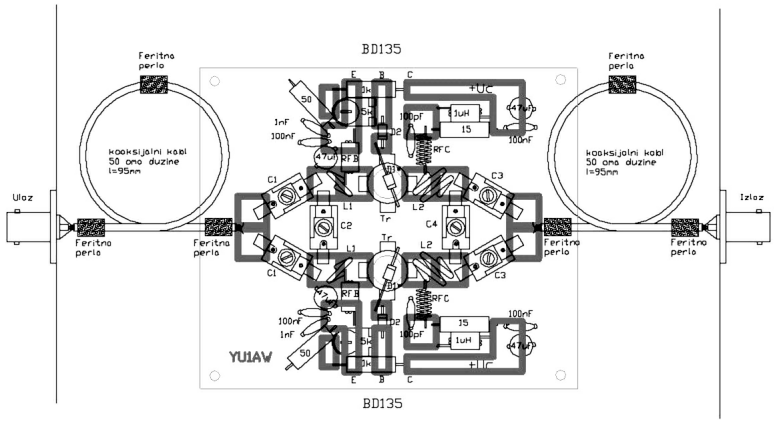

Fig 9.77: Component layout for the two transistor power amplifier

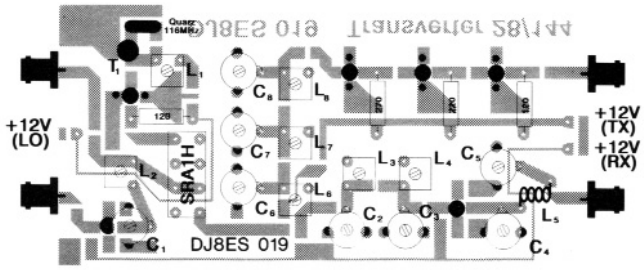

Fig 9.88: Component layout for the 2m transverter showing the component side of the PCB. The board size is 54 x 108mm

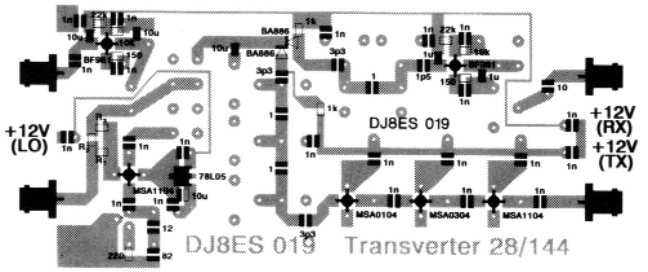

Fig 9.89: Component layout for the 2m transverter showing the track side of the PCB and the positions of the SMD components

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

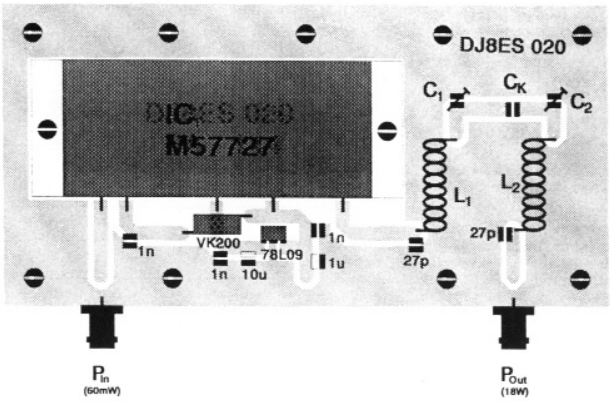

Fig 9.95: Component layout of the 2m power amplifier to be used with the 2m transverter. The board size is 54 x 108mm

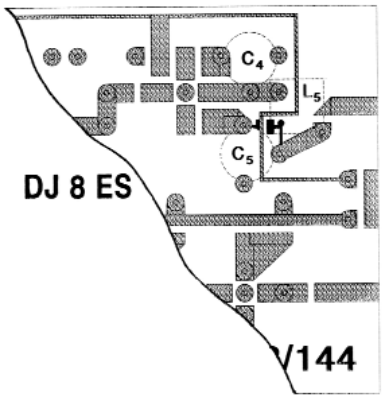

Fig 9.97: Details of modifications to the 2m transverter PCB for use as 6m transverter

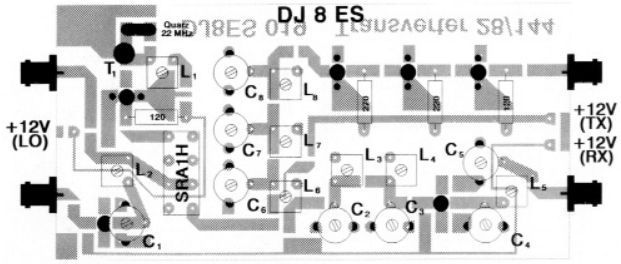

Fig 9.98: Component layout for the 6m transverter showing the component side of the PCB

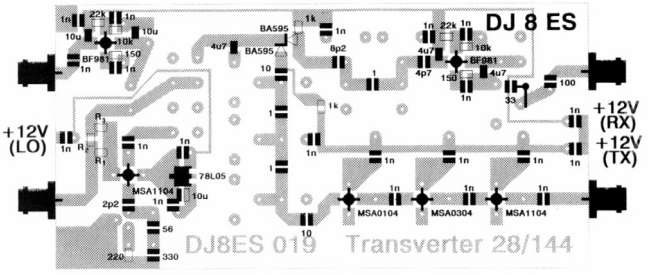

Fig 9.99: Component layout for the 6m transverter showing the track side of the PCB and the positions of the SMD components

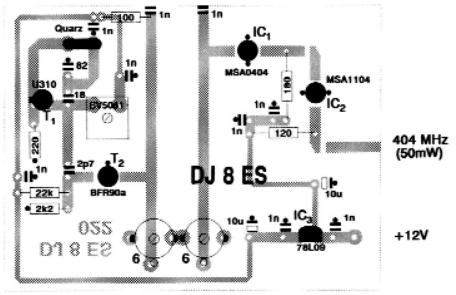

Fig 9.105: Component layout of the local oscillator used on the 70cm transverter showing the component side of the PCB.

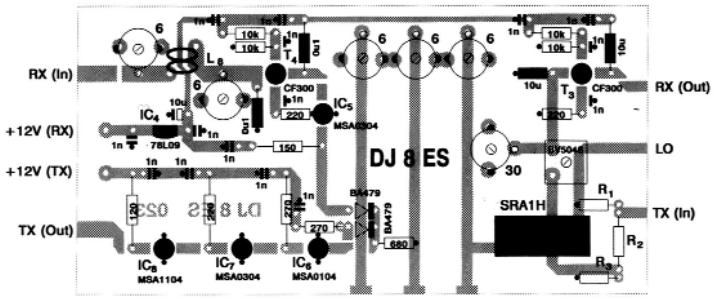

Fig 9.107: Component layout for the 70cm transverter showing the component side of the PCB

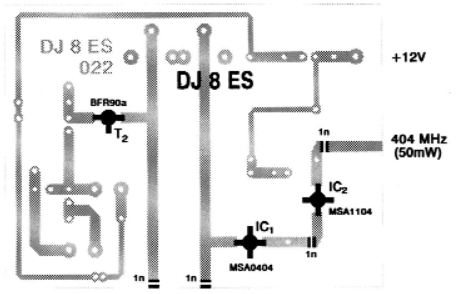

Fig 9.106: Component layout of the LO on the 70cm transverter showing the track side of the PCB and the positions of the SMD components

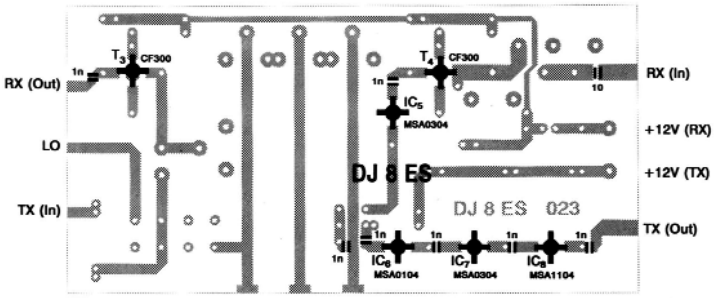

Fig 9.108: Component layout for the 70cm transverter showing the track side of the PCB and the positions of the SMD components

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

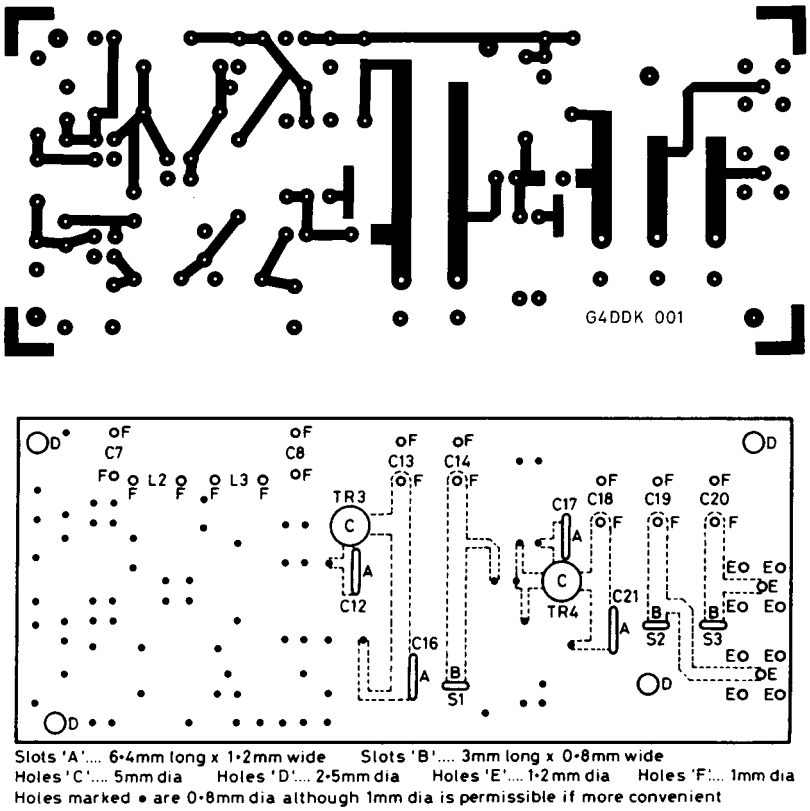

Fig 11.17: Printed circuit board artwork and drilling pattern for the microwave source G4DDK-001

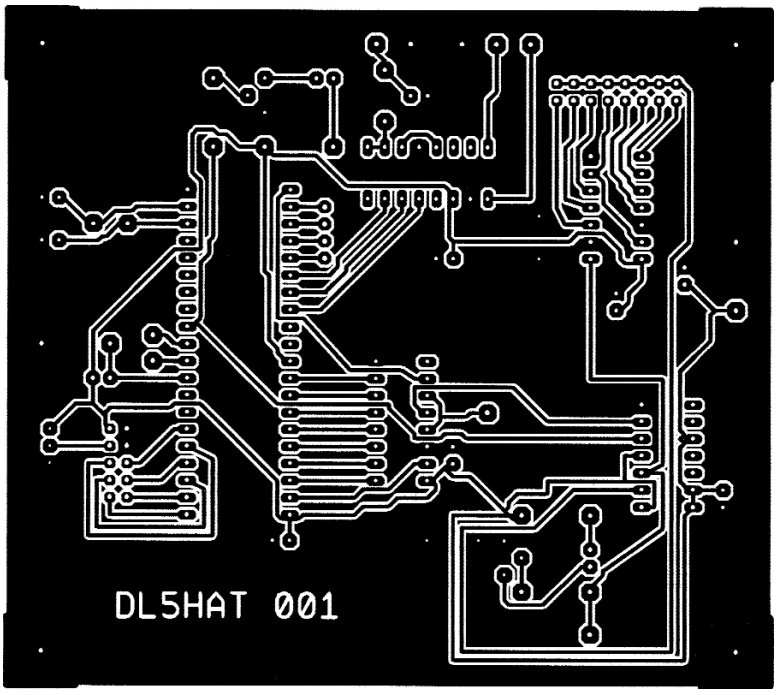

Fig 11.24: PCB layout (DL5HAT-001) for GPs control stage of the high precision frequency standard for 10MHz. The finished PCB should be 100mm x 100m

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

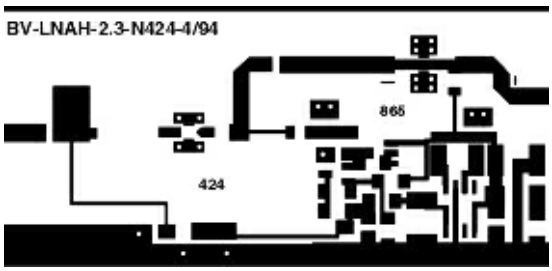

Fig 11.30: PCB layout for 13cm PHEMT. PCB dimensions are 34 x 72mm

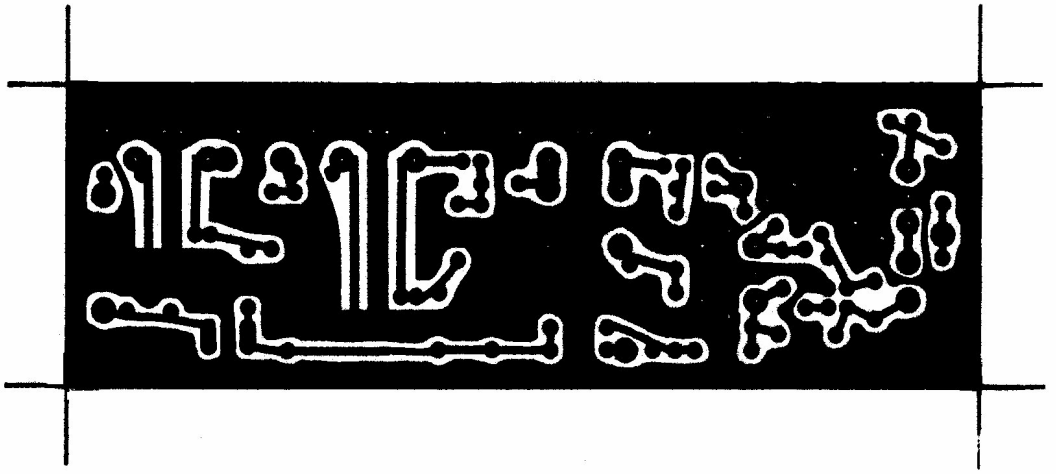

Fig 11.64: VCXO PCB for Zero-IF transceiver

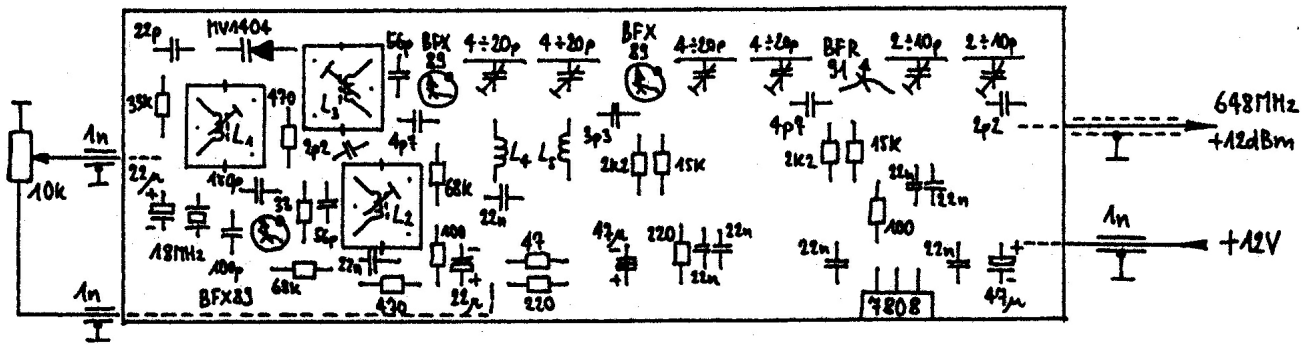

Fig 11.65: VCXO component layout for Zero-IF transceiver

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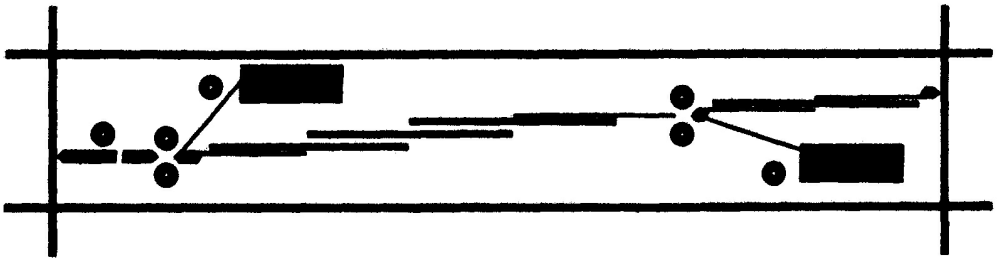

Fig 11.67: PCB for x4 multiplier to 2880MHz for Zero-IF transceiver

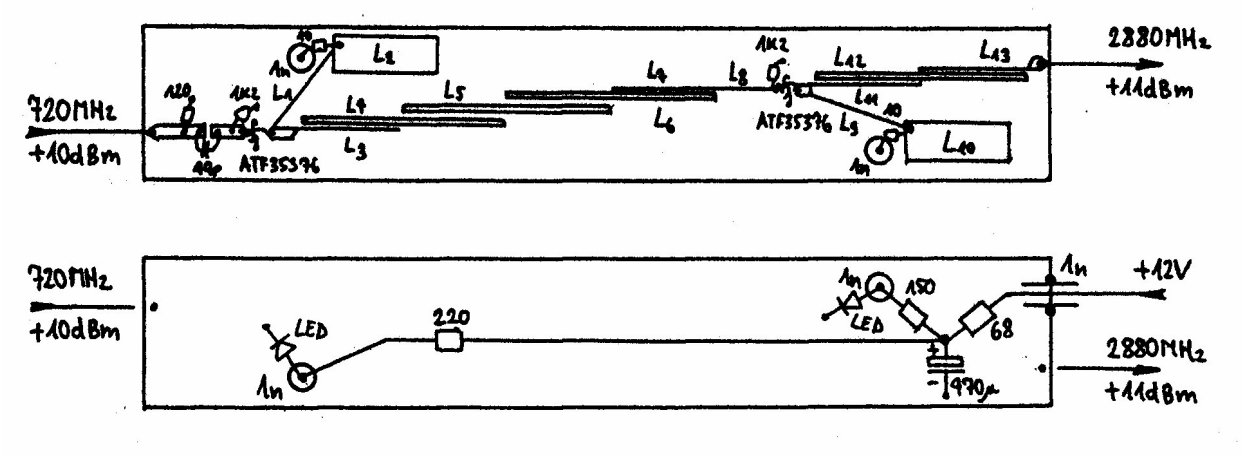

Fig 11.68: Component layout for x4 multiplier to 2880MHz for Zero-IF transceiver

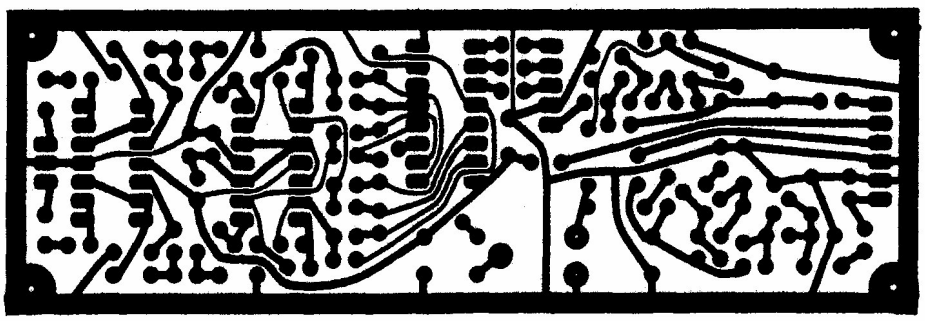

Fig 11.70: PCB for SSB/CW quadrature modulator for Zero-IF transceiver

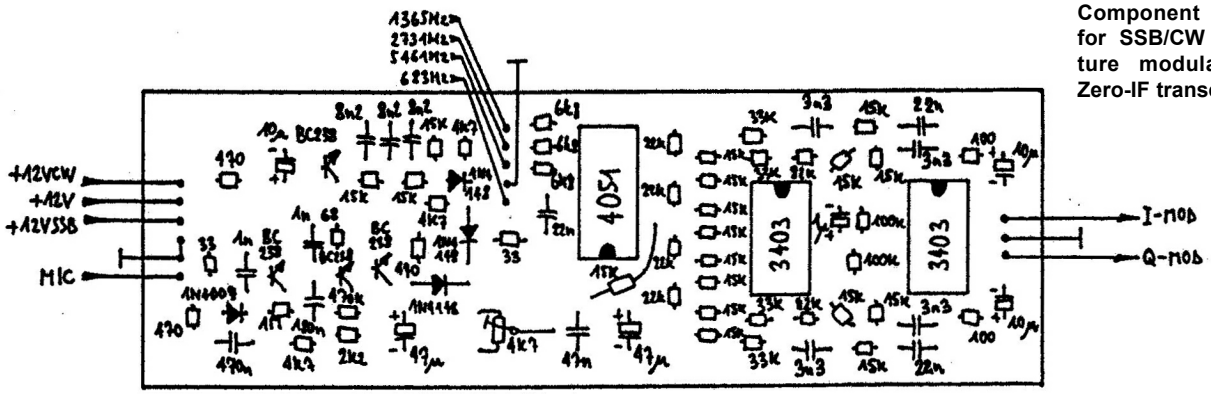

Fig 11.71: Component layout for SSB/CW quadrature modulator for Zero-IF transceiver

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

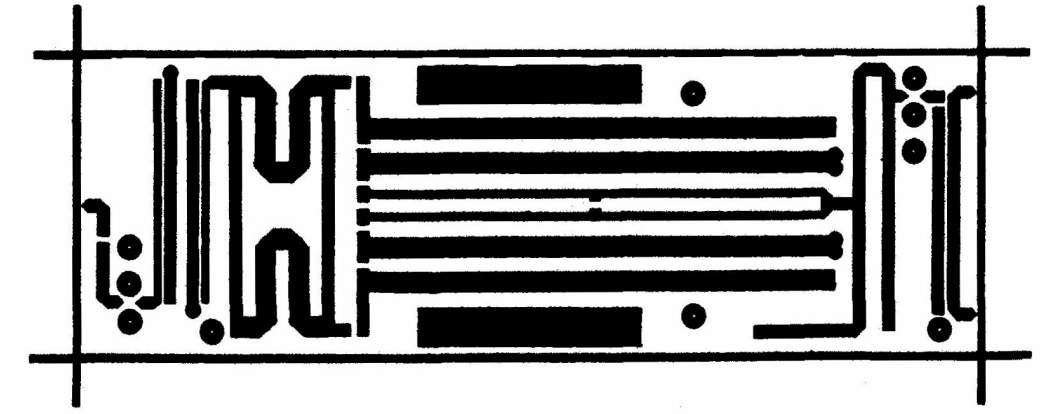

Fig 11.73: PCB for quadrature transmit modulator for 1296MHz Zero-IF transceiver

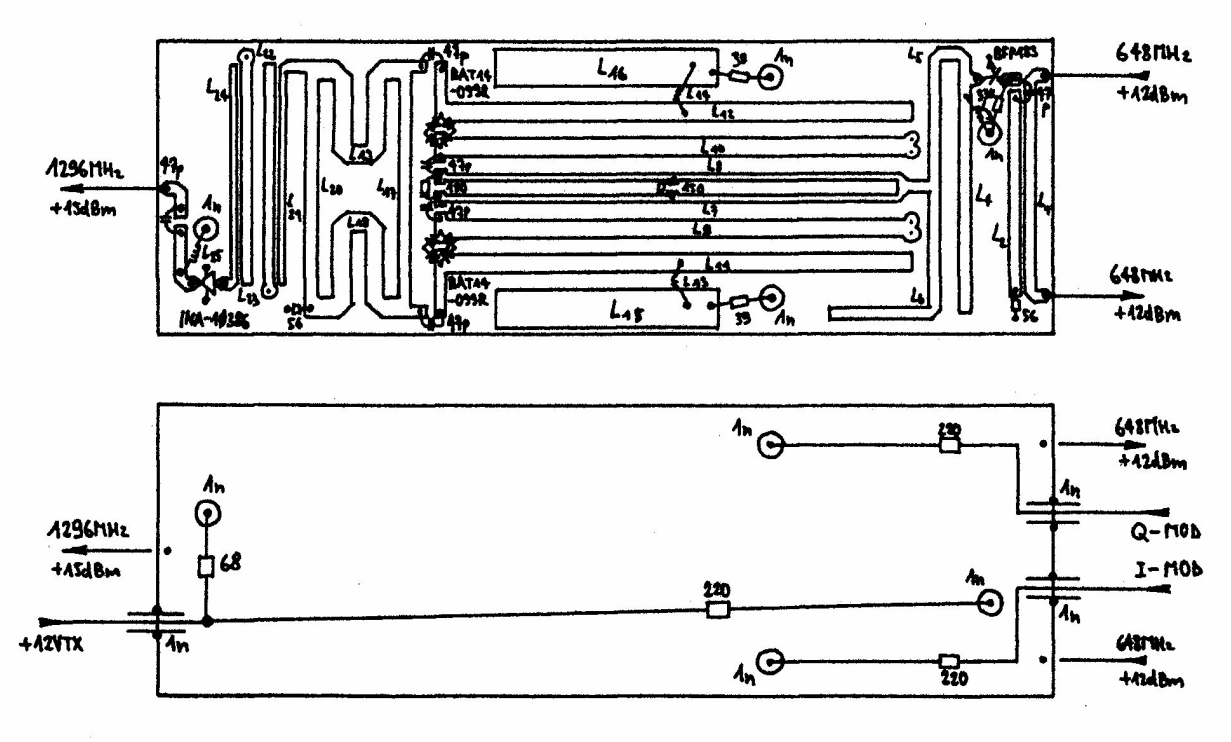

Fig 11.74: Component layout for quadrature transmit modulator for 1296MHz Zero-IF transceiver

Before using this artwork, please read the IMPORTANT NOTICE on page B.1 of this Appendix

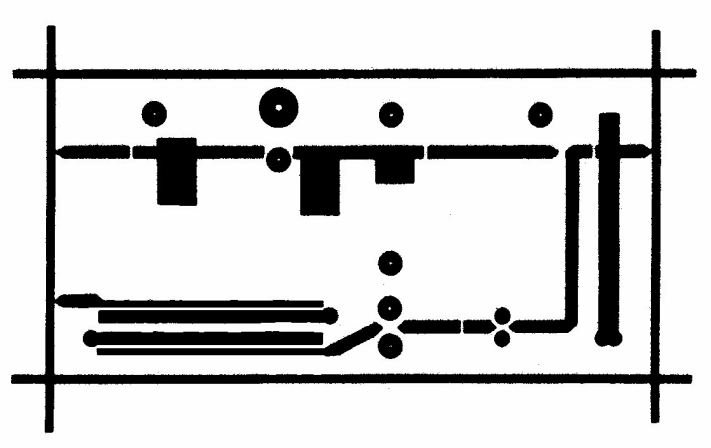

Fig 11.76: PCB for RF front-end for 1296MHz Zero-IF transceiver

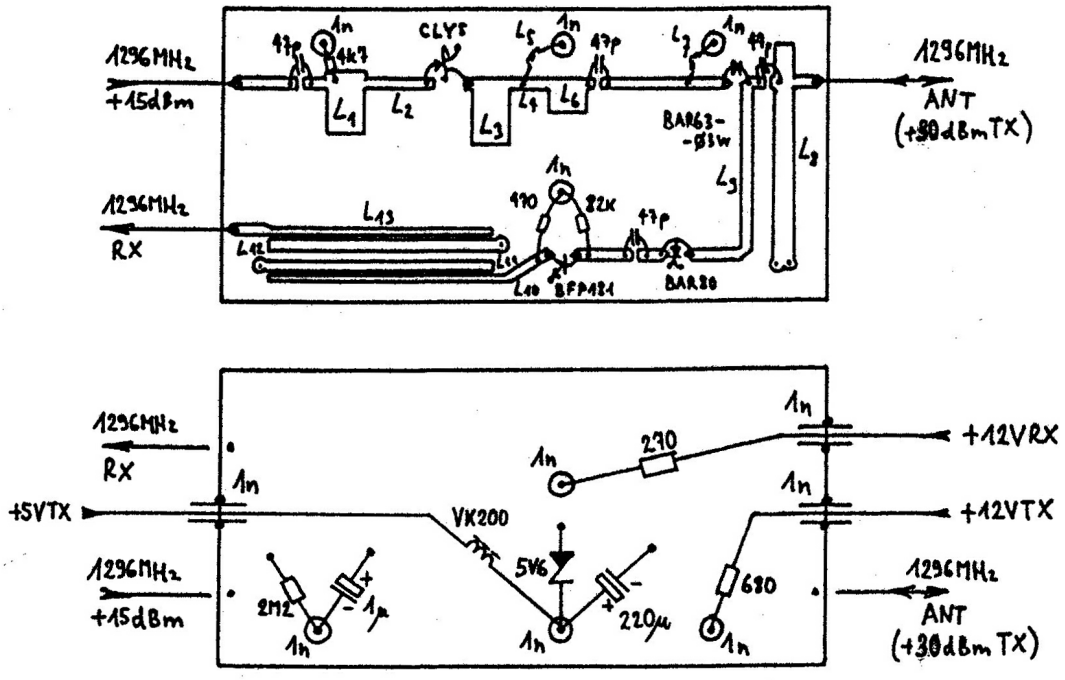

Fig 11.77: Component layout for RF front-end for 1296MHz Zero-IF transceiver

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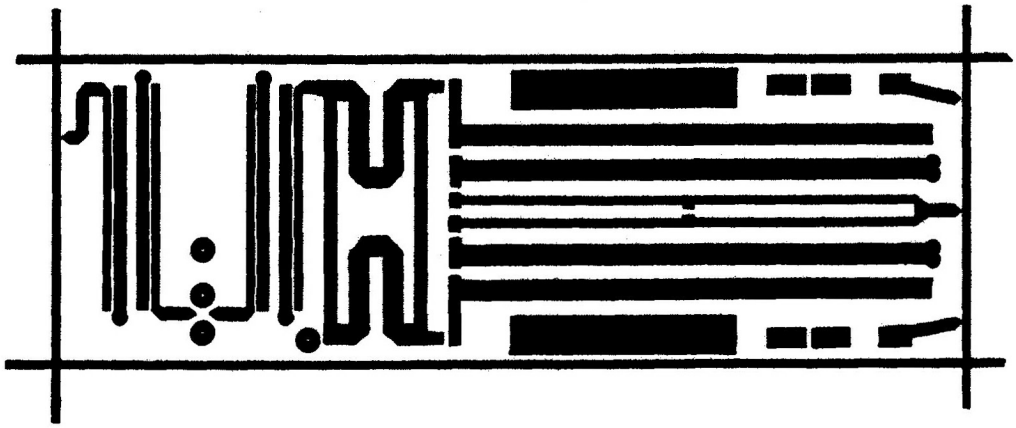

Fig 11.79: PCB for quadrature receive mixer for 1296MHz Zero-IF transceiver

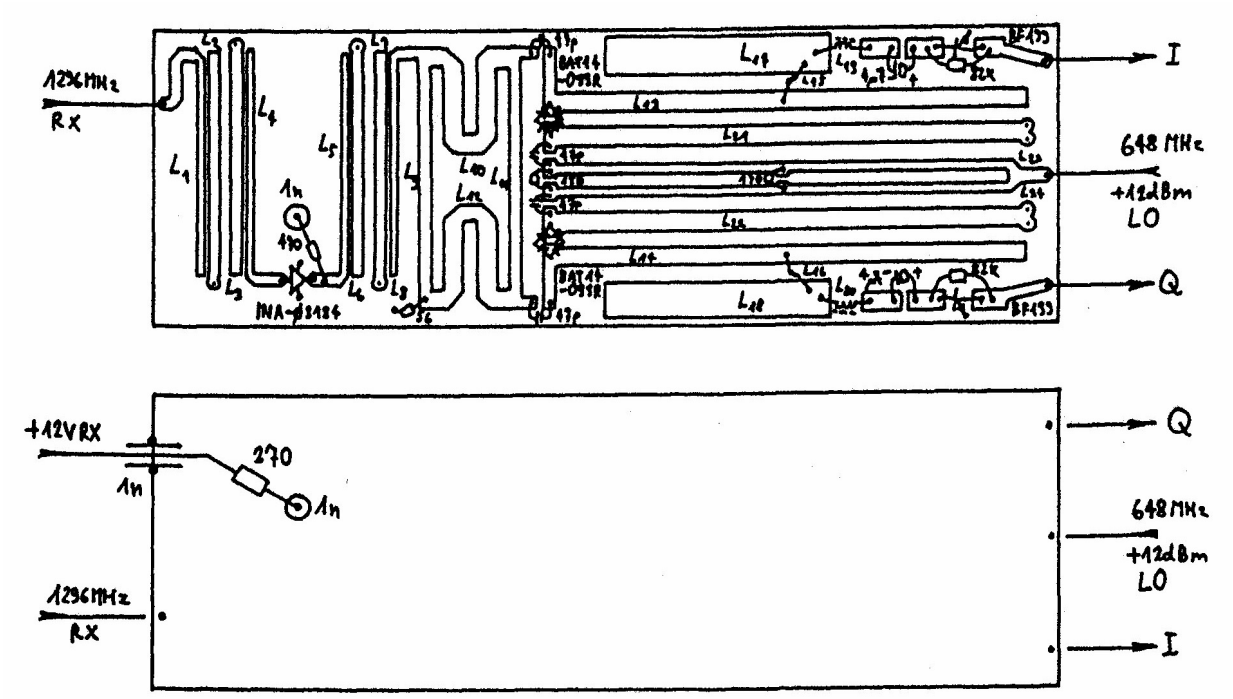

Fig 11.80: Component layout for quadrature receive mixer for 1296MHz Zero-IF transceiver

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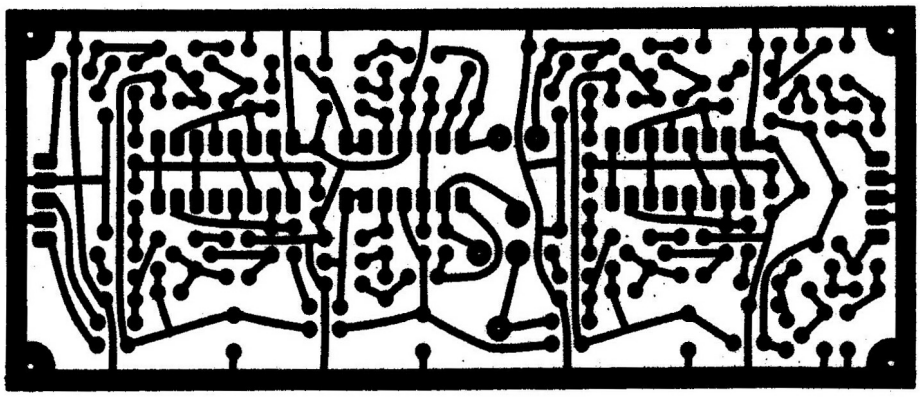
Fig 11.82: PCB for quadrature receive SSB IF amplifier for 1296MHz Zero-IF transceiver



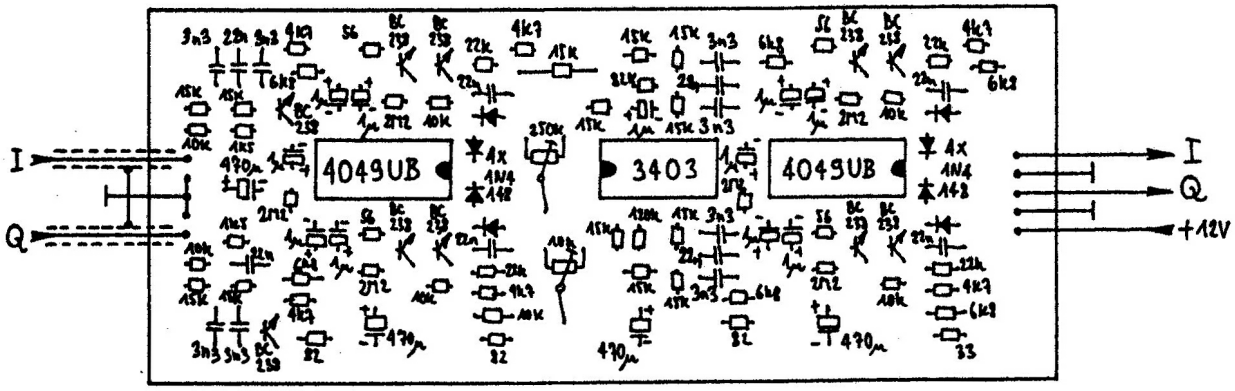
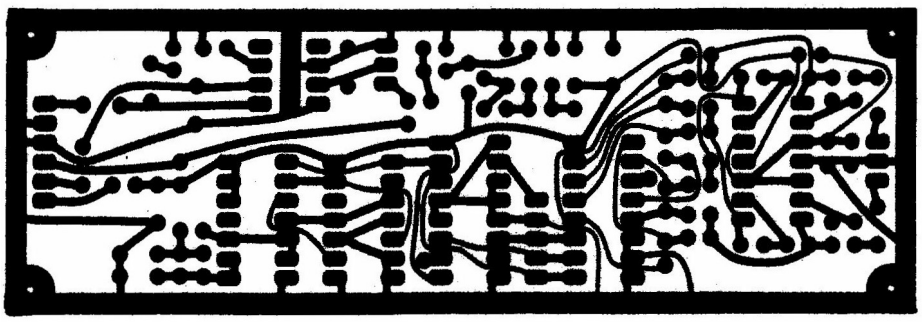


Fig 11.83: Component layout for quadrature receive SSB IF amplifier for 1296MHz Zero-IF transceiver

Fig 11.85: PCB for quadrature SSB demodulator and AF amplifier for 1296MHz Zero-IF transceiver



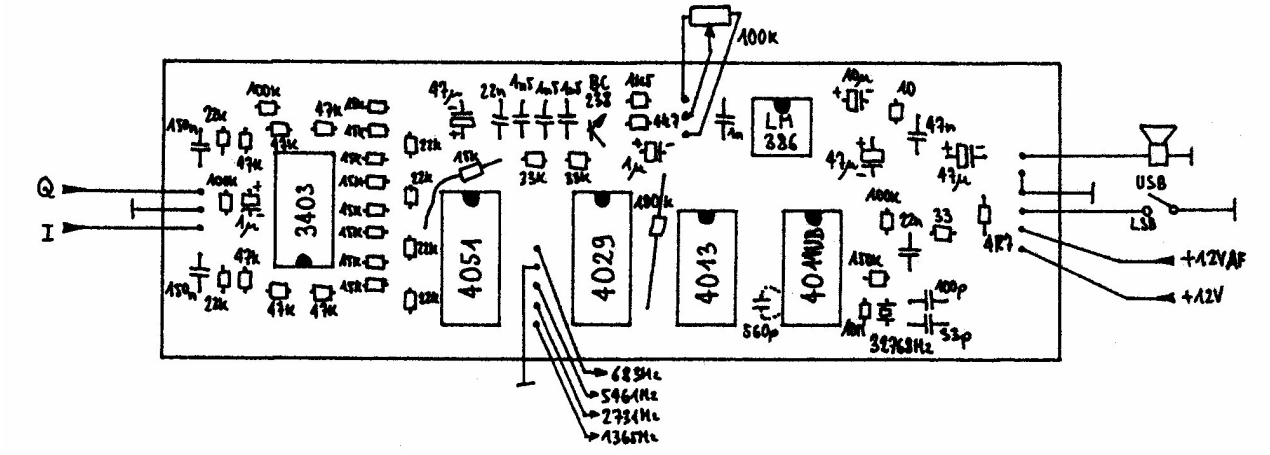


Fig 11.86: Component layout for quadrature SSB demodulator and AF amplifier for 1296MHz Zero-IF transceiver

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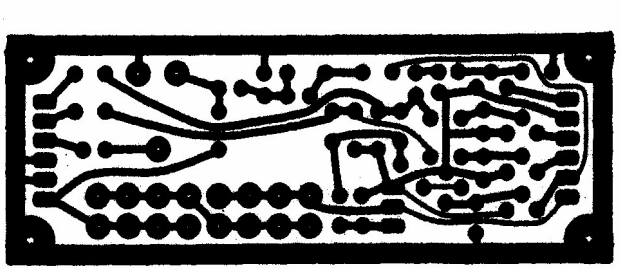

Fig 11.88: PCB for SSB/CW transmit/receive switching for Zero-IF transceiver

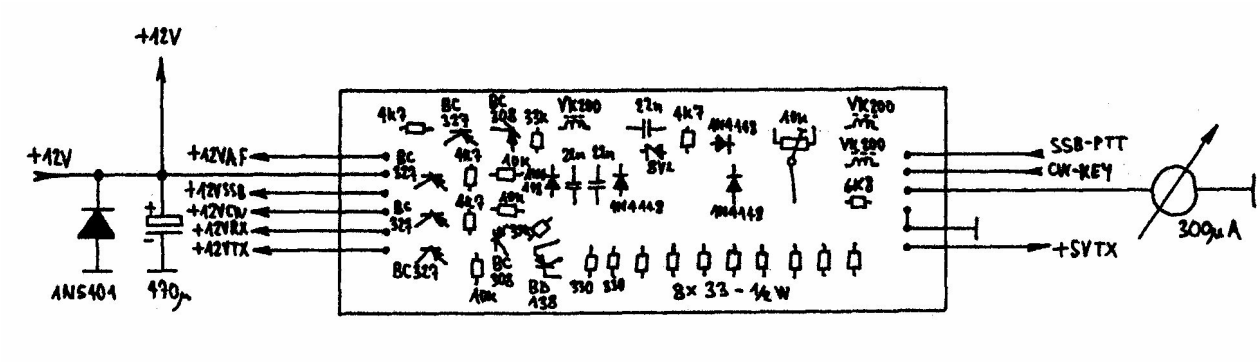

Fig 11.89: Component layout for SSB/CW transmit/receive switching for Zero-IF transceiver

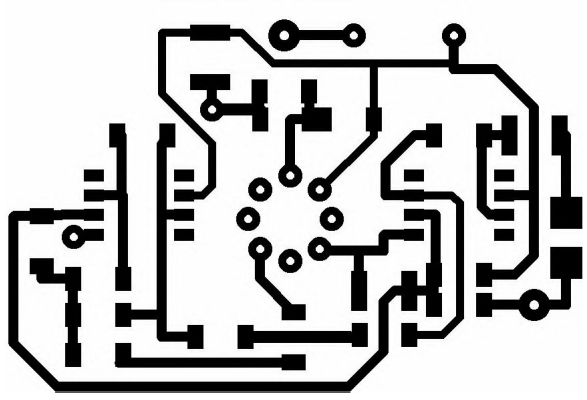

Fig 11.123: PCB artwork for the G0MRF laser receiver

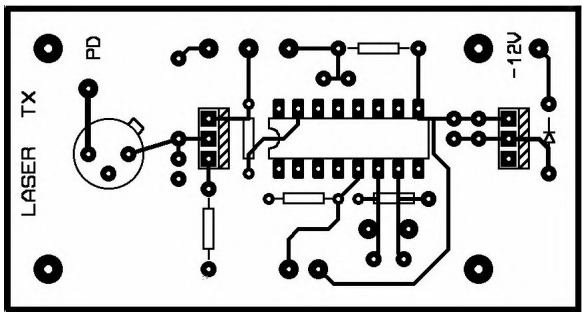

Fig 11.128: PCB artwork for the G0MRF laser transmitter

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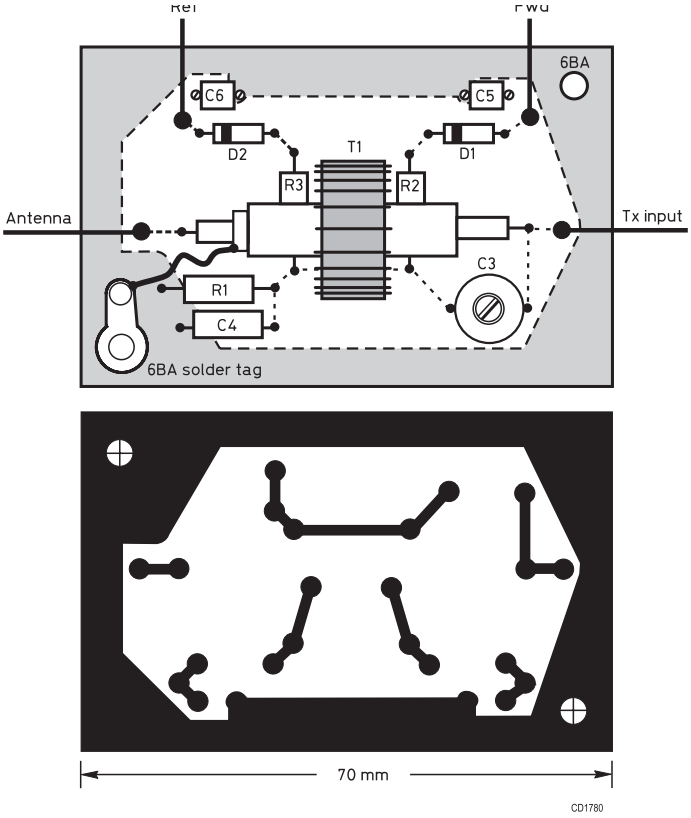
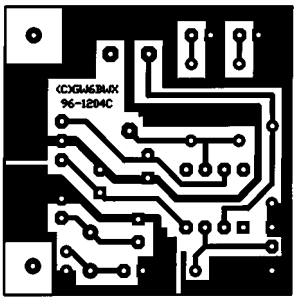
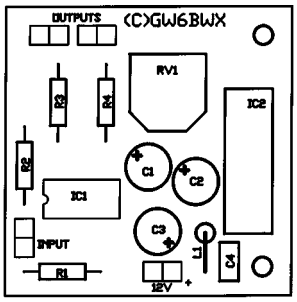


Fig 15.30: PCB and layout for the SWR bridge





(left) Fig 20.5: PCB for video amplifier

(right) Fig 20.6: Component layout for video amplifier

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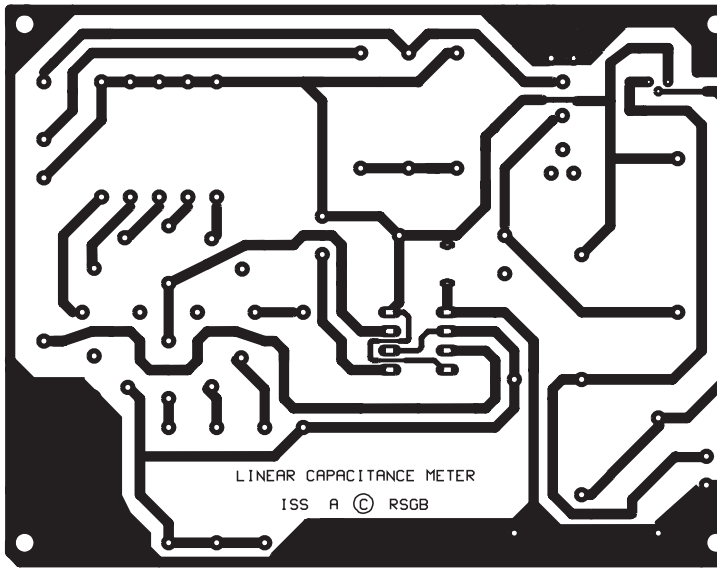

Fig 25.27: Linear scale capacitance meter PCB layout

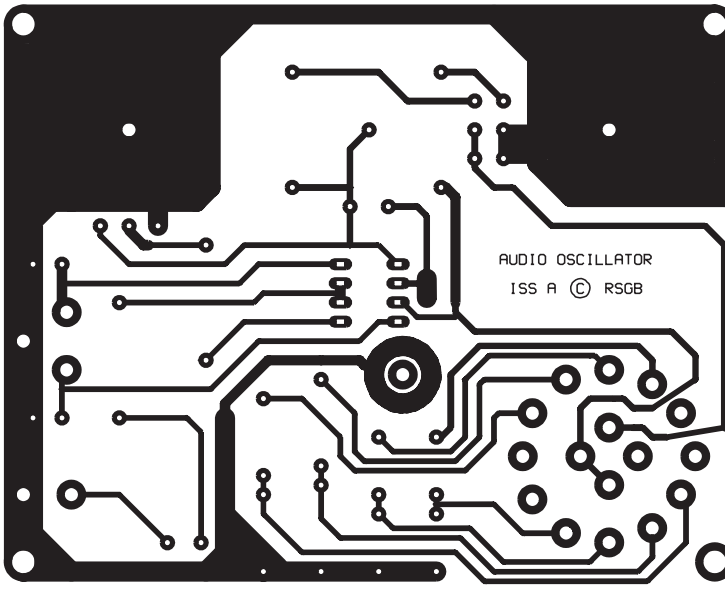

Fig 25.41: Low frequency oscillator PCB layout

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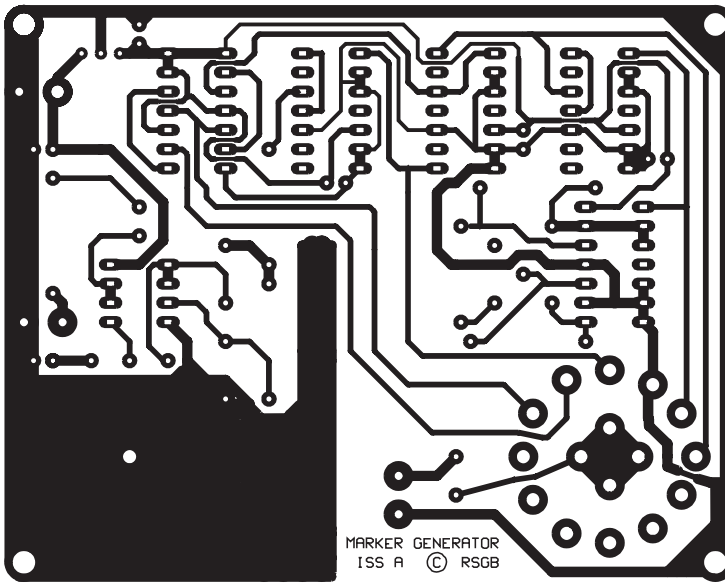

Fig 25.24: Frequency marker PCB layout

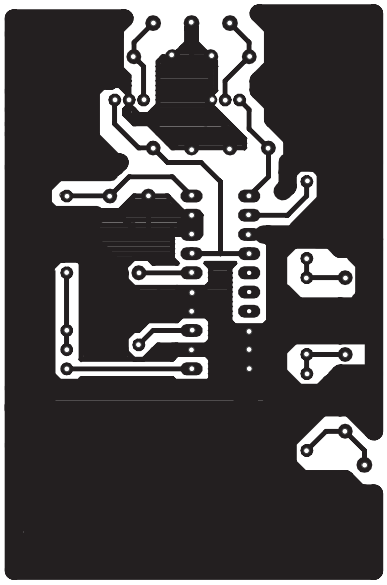

Fig 25.47: HF signal source PCB layout

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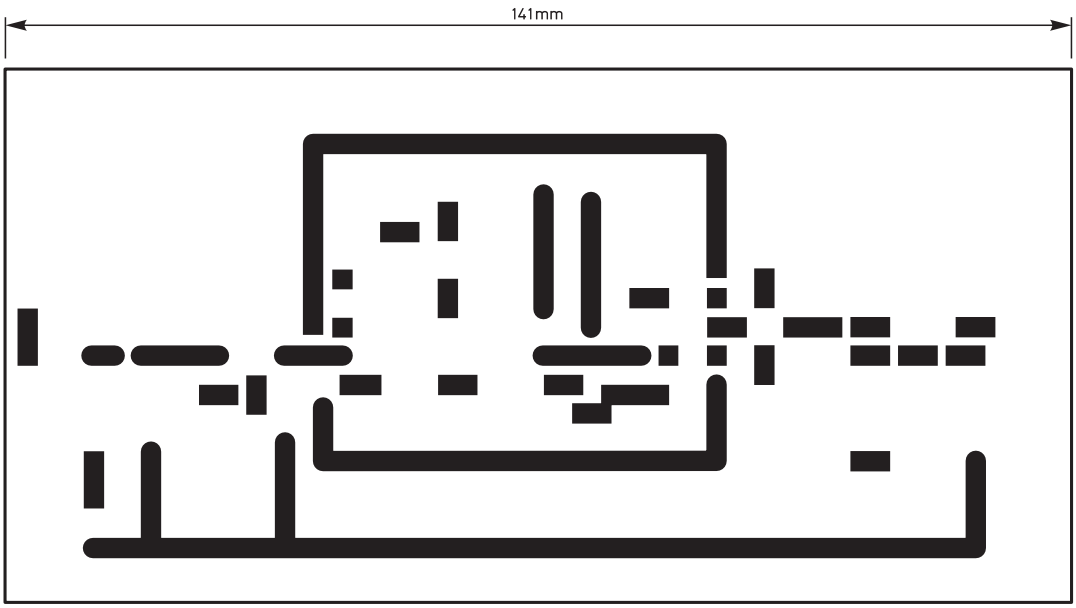

Fig 25.51: PCB layout for the combined 2m and 70cm signal source

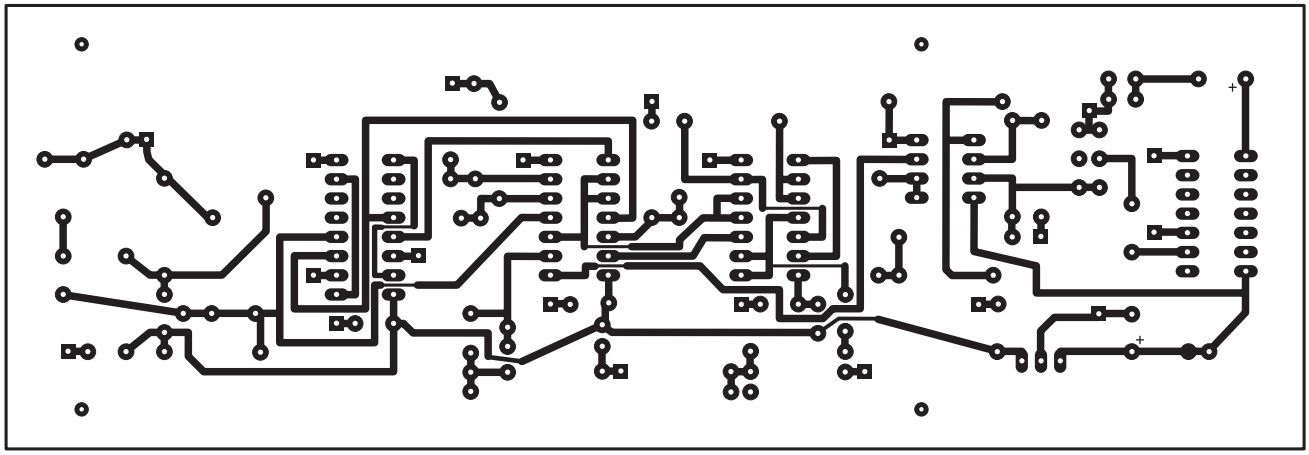

Fig 25.60: PCB layout for the receiver calibrator and transmitter monitor

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