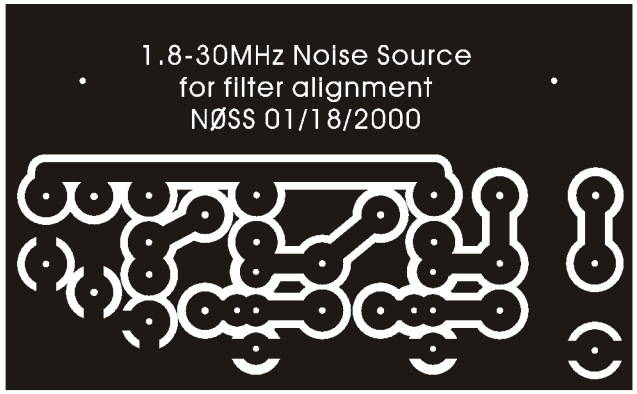
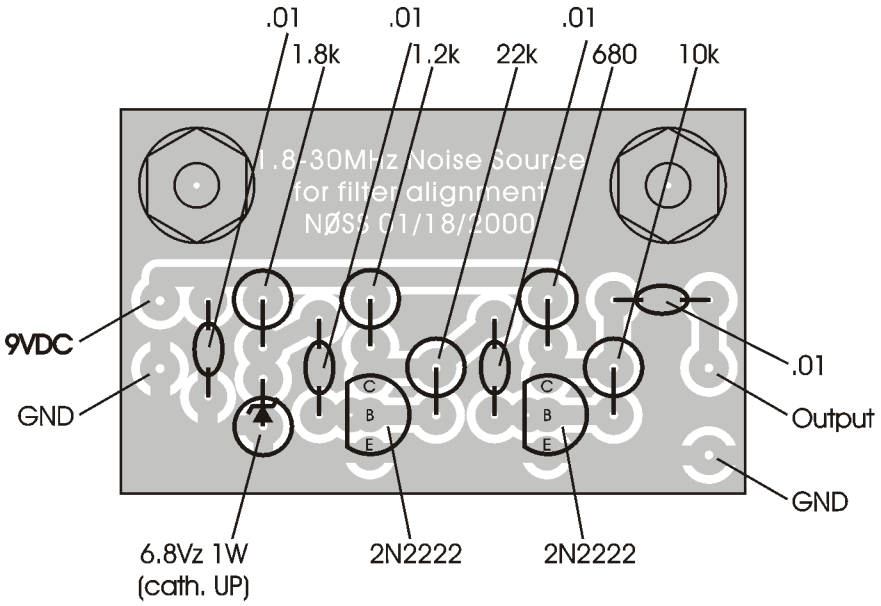
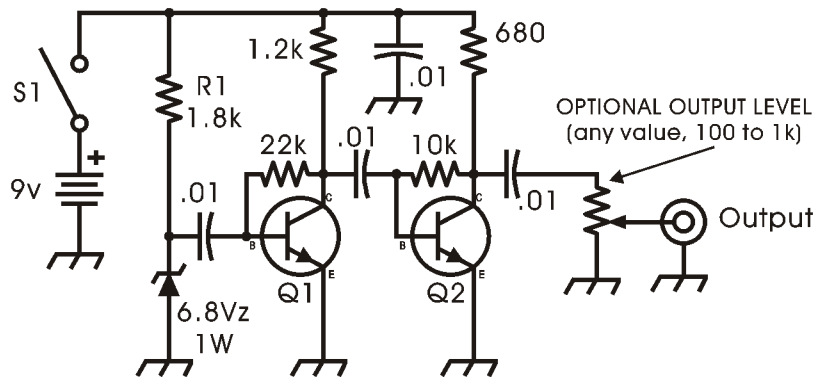
Broadband (HF) Noise Generator for Filter Alignment

PC Board Layout is 2X Final Size (1-5/8" x 1")





Component layout, as viewed from the FOIL side of the board.
Components mount on the NON-FOIL side of the PC board



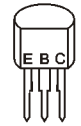
Q1, Q2 - 2N2222, 2N4124 or 2N3904

Notes:

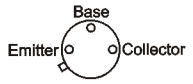
The pad layout for the transistors includes one extra pad. This is to accommodate both the in-line pins of plastic cased transistors and the triangle patterned pads of metal cased transistors. Use whichever pads are appropriate for your particular transistors.

If you do not have a 6.8Vz Zener diode, anything down to about 5.2Vz will suffice, BUT you will have to experiment with the value of R1 in order to obtain adequate noise output.

Pinouts for transistors



Type: TO-92



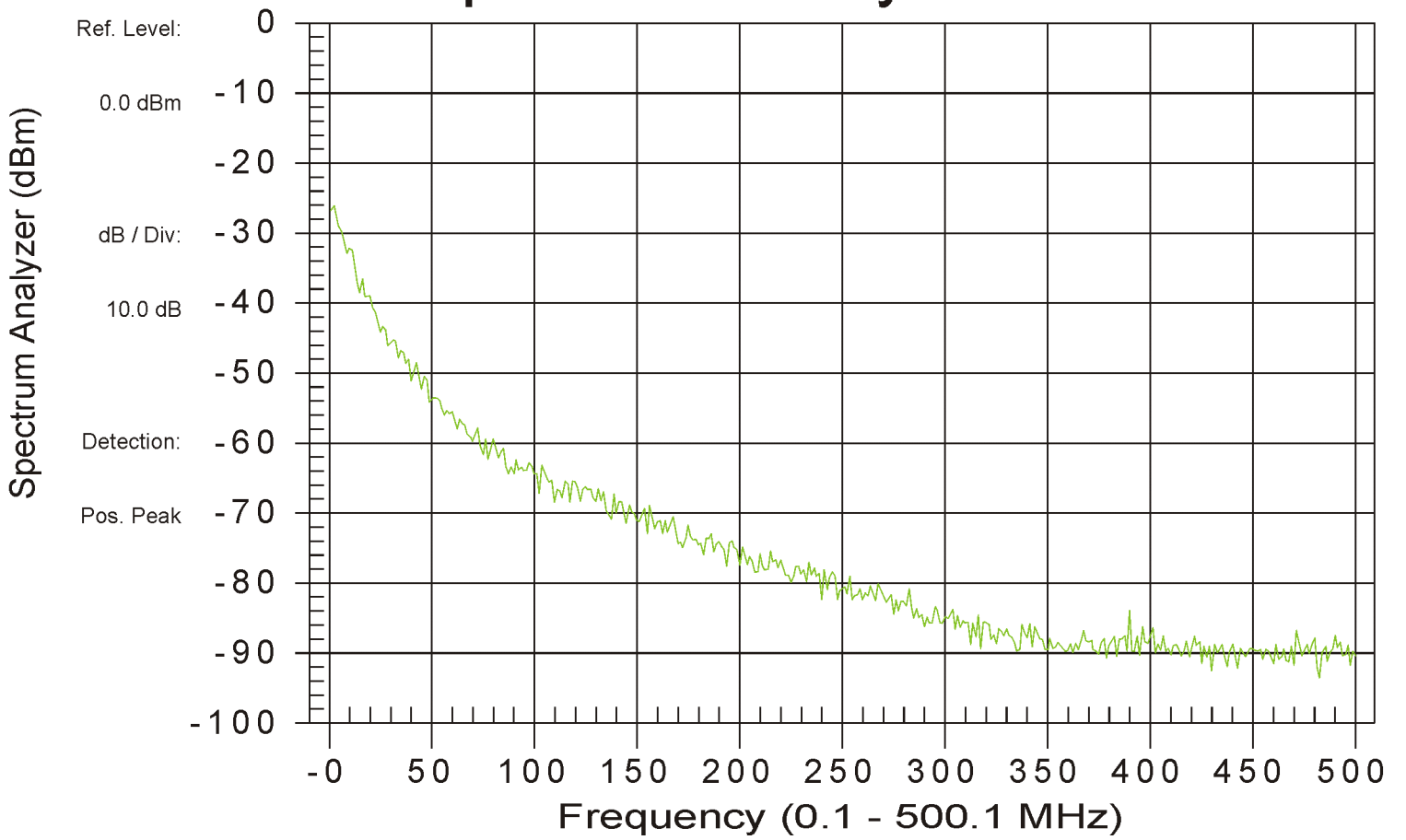
Type: TO-18

NOTE: For TO-92 (plastic) transistors, use the three PC board holes which are in-line. For TO-18 (metal-cased) transistors, use the triangular hole pattern.

Although not normally required, an (optional) output level control (100 to 1k Ohms) is shown on the schematic.

NØSS Noise Generator

Spectrum Analysis



CF: 250.1 MHz
RBW: 1 MHz
Model: MS2711A

SPAN: 500.0 MHz
VBW: 300 kHz

Attenuation: 0 dB
Antenna: NONE

Spectrum trace courtesy of: John Farnsworth, KF6NMP