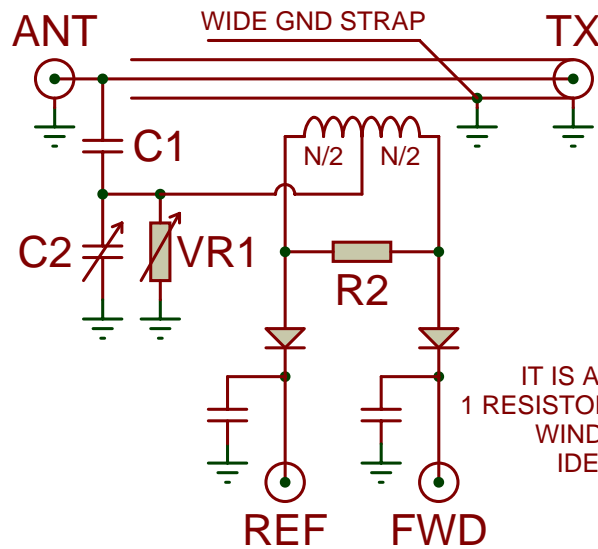


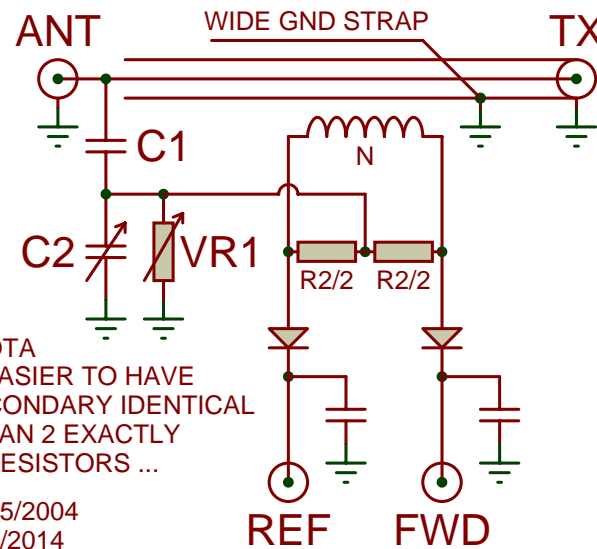
PHASE COMPENSATED MODIFIED BRUENE BRIDGES

TO HAVE NO FREQUENCY RESPONSE DEPENDANCE, IT IS VERY IMPORTANT TO HAVE GROUND STRAP ON COAXIAL LINE AS SHORT & WIDE AS POSSIBLE (LOW INDUCTANCE), AND AS NEAR AS POSSIBLE OF TOROID



NOTA
IT IS ALWAYS EASIER TO HAVE
1 RESISTOR & 2 SECONDARY IDENTICAL
WINDINGS, THAN 2 EXACTLY
IDENTICAL RESISTORS ...

F1FRV 05/2004
REV 01/2014



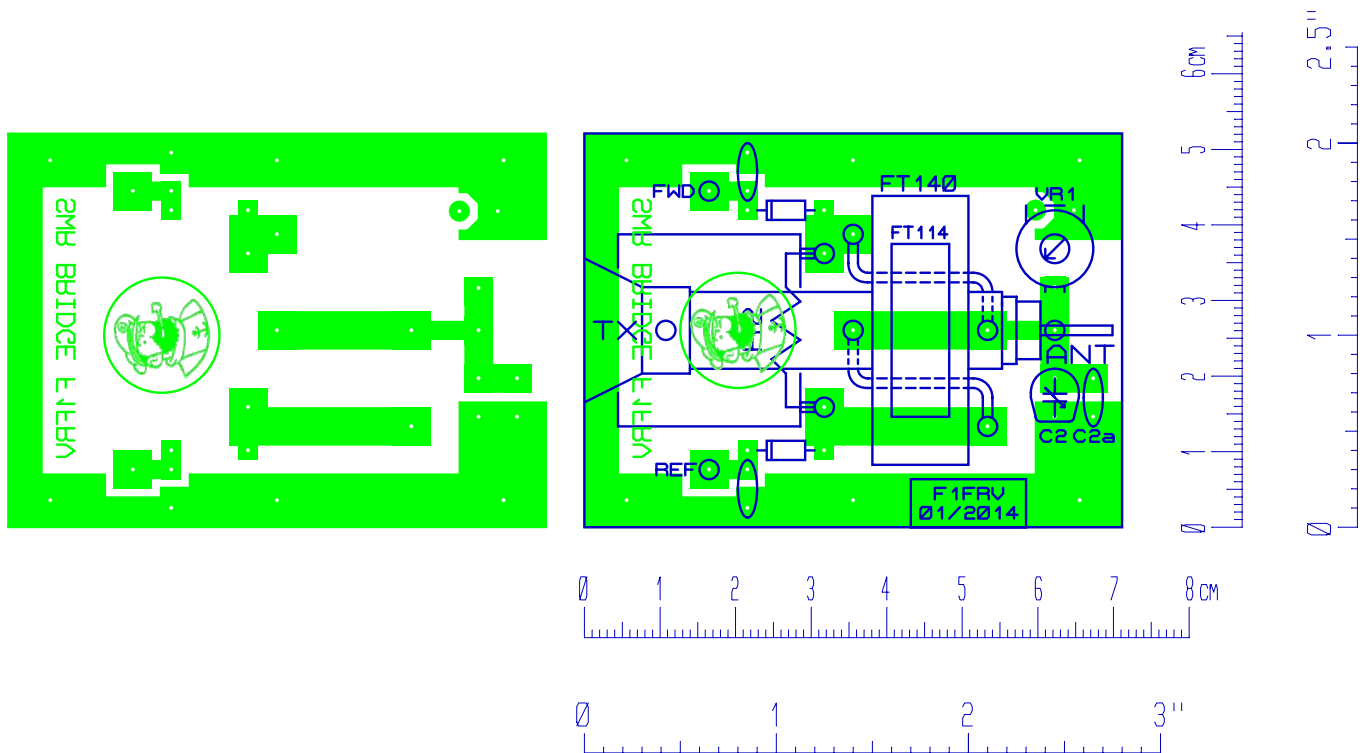
AUTOMATIC SWR METER PHASE COMPENSATED BRIDGE FOR SWR & POWER

DATE: 01/2014 REV: 5
BY: F1FRV@sfr.fr
DOC Nr: AMATEUR RADIO

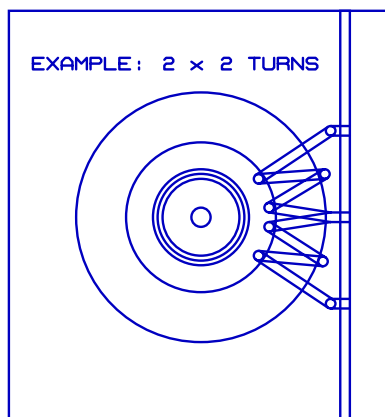
SEE EXCEL SHEET FOR CALCULATIONS

TOROID FT 82-43 FOR 1/4" COAX
TOROID FT 114-43 FOR 1/4 AND 3/8" COAX
TOROID FT 140-43 FOR 1/2 AND 5/8" COAX
TOROID FT 240-43 FOR 7/8" COAX

PCB DIMENSIONS 2.05" x 2.8" (51.8 x 71.1 MM) 3Ø HOLES
CAN FIT INTO SCHUBERT TINY BOX 55x74x50 MM FOR LOW POWERS.
FIXATION HOLES 4 x M3 SCREWS, 45 x 60 MM BETWEEN AXYS.



USE SHIELDED WIRES FROM OUTLETS
TO METER OR AUTOMATIC SWR CIRCUIT



SCHOTTKY DIODES 1N5711
MAX REVERSE VOLTAGE 70 V
PAIRED IF POSSIBLE

R2: NON INDUCTIVE RESISTOR
BI TECHNOLOGIES MODEL "BPC 10"
AVAILABLE AT FARNELL OR RADIOSPARES

FOR SMALL POWERS, USE TINY
BOX "SCHUBERT" 55x74x50 MM

FOR HIGH POWER, USE LARGER
NON MAGNETIC SHIELDED BOX
ALUMINIUM ALLOY OR EMI/RFI
COATED PLASTIC BOXES LIKE BIM
2005/15, 5007/17 OR 5005/15 FROM
BOSS ENCLOSURES AVAILABLE AT
FARNELL OR RADIOSPARES

VR1: VARIABLE RESISTOR
TO BE ADJUSTED AT CALCULATED
VALUE GIVEN BY EXCEL SHEET

C2: ADJUSTABLE CAPACITOR
CAN BE PARALLELED WITH FIXED
C2a VALUE (IF NECESSARY)

