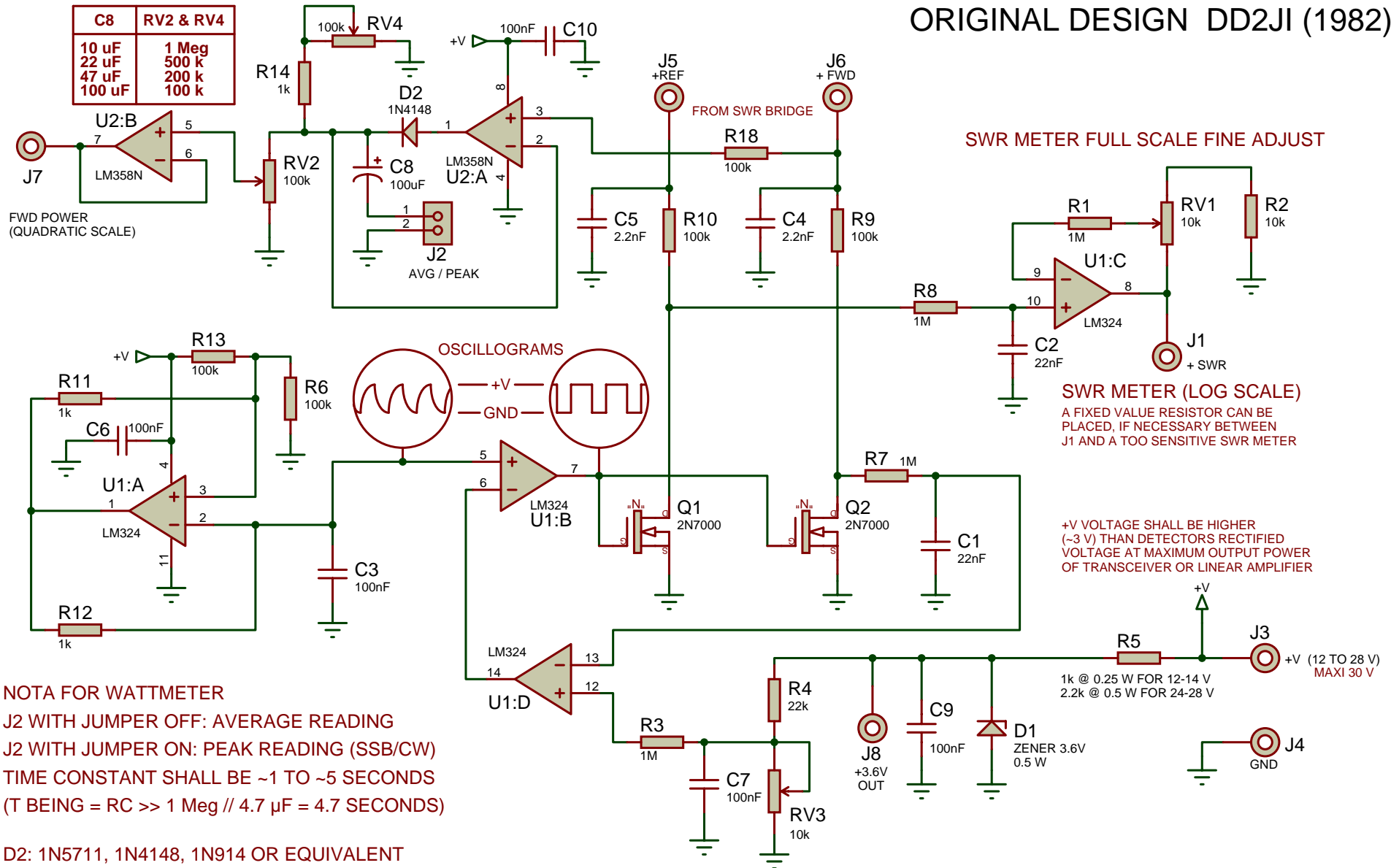


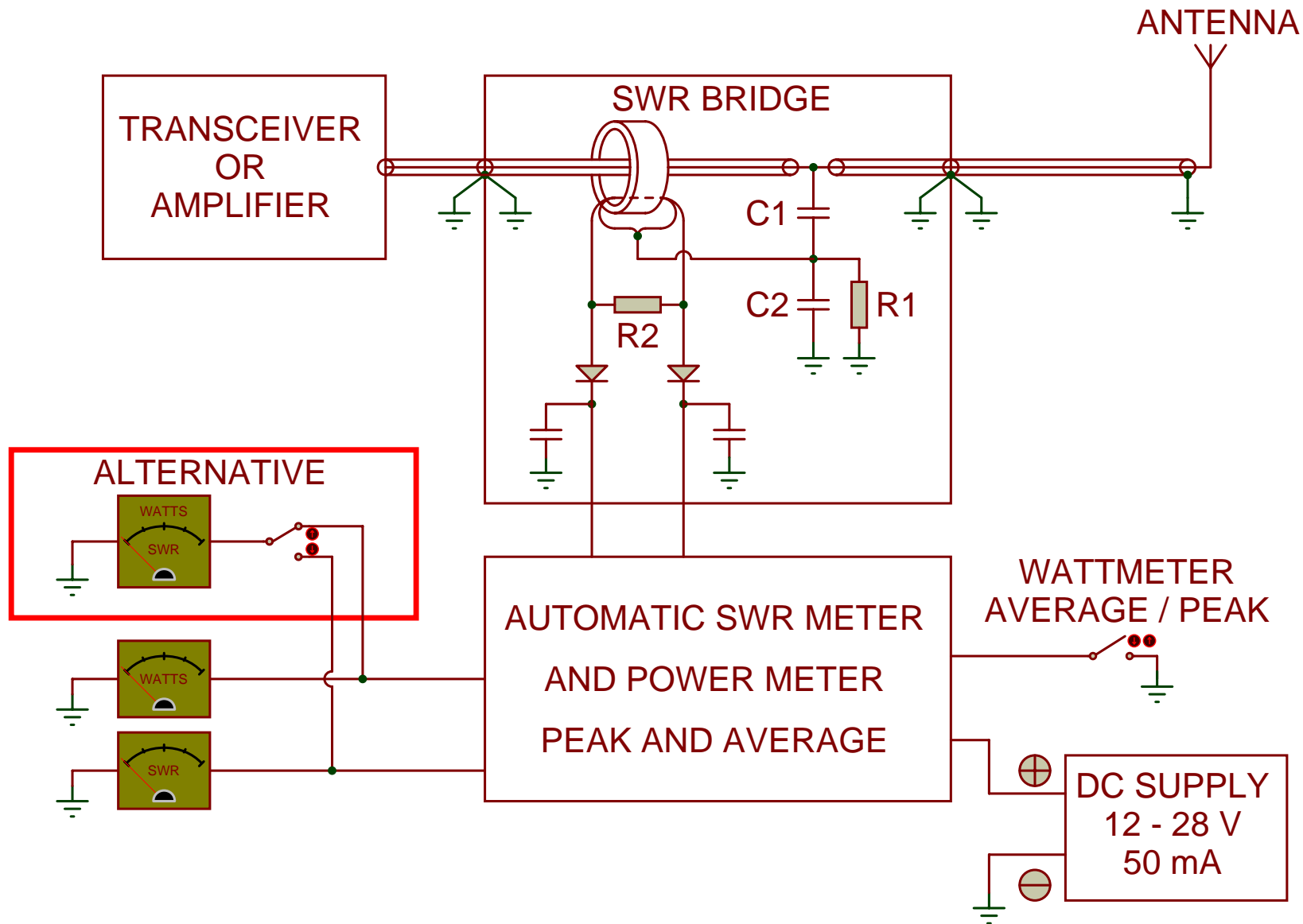
ORIGINAL DESIGN DD2JI (1982)



D2: 1N5711, 1N4148, 1N914 OR EQUIVALENT
Q1, Q2: 2N7000, VN10KM, ZVN4306 ETC....
U1: MUST BE LM324 U2: MUST BE LM358
ALL 1 MEGHOMS & 100 k RESISTORS: ~2%
ALL 22 nF: ~5% OR PAIRED (IF POSSIBLE)

SCHEMATIC DIAGRAM AUTOMATIC SWR & POWER METER

DOC N°: AMATEUR RADIO
BY: f1frv@sfr.fr <http://f1frv.free.fr>
DATE: 10/05/13 REV: 6 PAGE: 1/2



AUTOMATIC SWR METER & PEAK WATTMETER (AVERAGE WATTMETER BY REMOVING J2)

DATE: 05/2013 REV: 6
BY: F1FRV@SFR.FR
DOC Nr: AMATEUR RADIO

AUTOMATIC SWR METER ADJUSTEMENT PROCEDURE

CONNECT CIRCUIT TO DC SUPPLY (13 TO 28 V)
CONNECT TOGETHER J5 AND J6 TO AN OTHER TEST
SUPPLY, MAX VOLTAGE = DC SUPPLY - 3 VOLTS
ADJUST RV1 & RV3 FOR SWR METER FULL SCALE

DISCONNECT J5 AND J6 FROM TEST SUPPLY

WITH THE SAME TEST DC SUPPLY, APPLY ANY DC VOLTAGE
(MAXI = DC SUPPLY - 3 V) ON J6 AND HIS EXACT HALF ON J5
METER SHALL INDICATE PRECISELY MID SCALE (SWR = 3)
METER INDICATES RATIO OF FWD/REF VOLTAGES
TO HAVE SWR INDICATION, USE LOGARITHMIC METER SCALE

YOU CAN NOW CONNECT TO YOUR SWR BRIDGE AND ENJOY

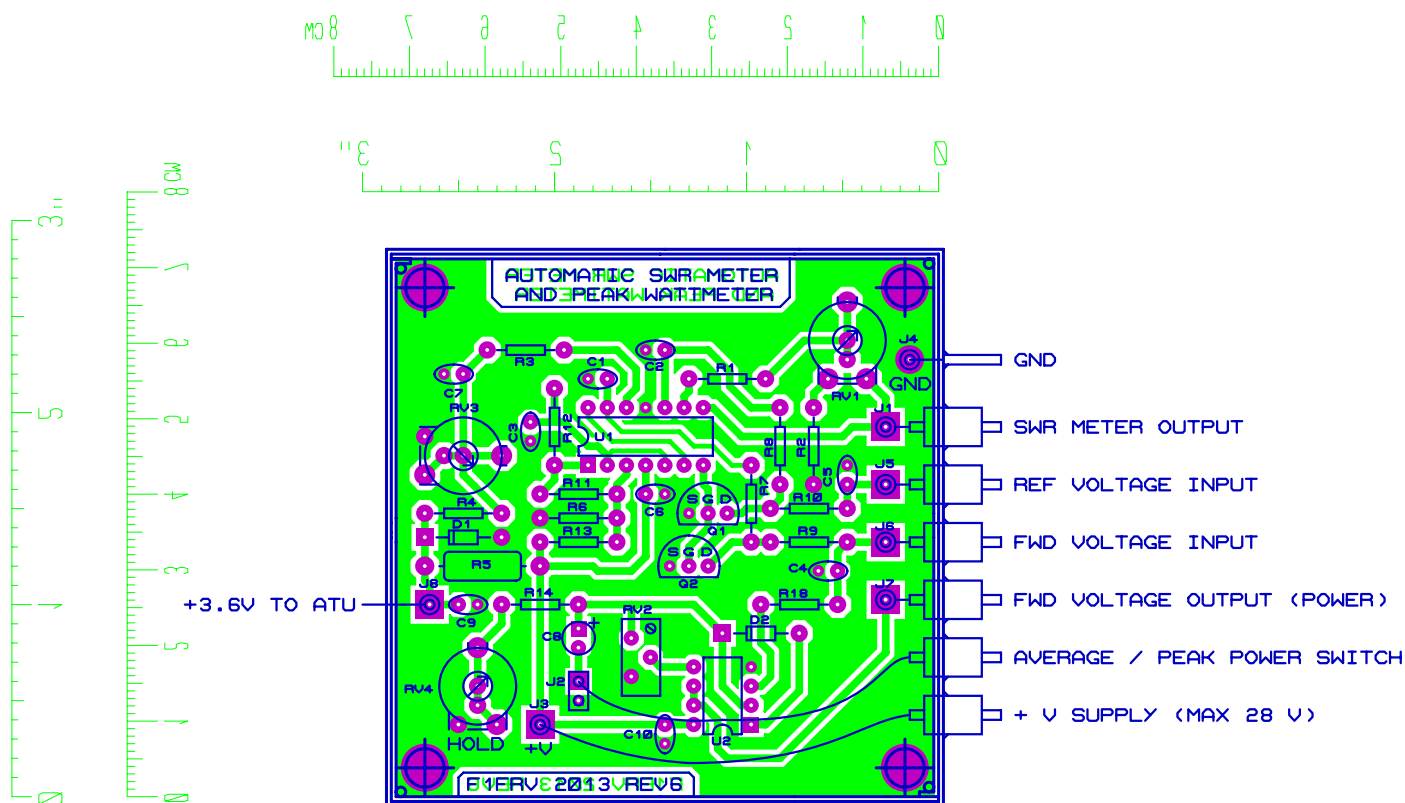
ADJUST RV2 FOR POWER METER SCALE, BY COMPARISON WITH
AN ACURATE POWER METER ON 50 OHMS DUMMY LOAD
TO HAVE PWR INDICATION, USE QUADRATIC METER SCALE
WITH 25% AT MID SCALE AND 100% FULL SCALE

TO DRAW YOUR OWN METER SCALE, YOU CAN USE F5BU's
FREEWARE "GALVA" AT: <http://f1frv.free.fr> PAGE "LINKS"

THAT'S ALL FOX !!!!

(AVERAGE WATTMETER BY REMOVING J2)

PCB SINGLE SIDE: 71 x 71 mm (2.8" x 2.8") WITH 113 HOLES
TINY BOX SCHUBERT 74x74x30 mm



THESE TYPES OF VARIABLE
RESISTORS CAN BE USED



USE PREFERABLY 5 OR 10 TURNS FOR RV2

FED THRU CAPACITORS 1nF
FOR BOX INLETS/OUTLETS

