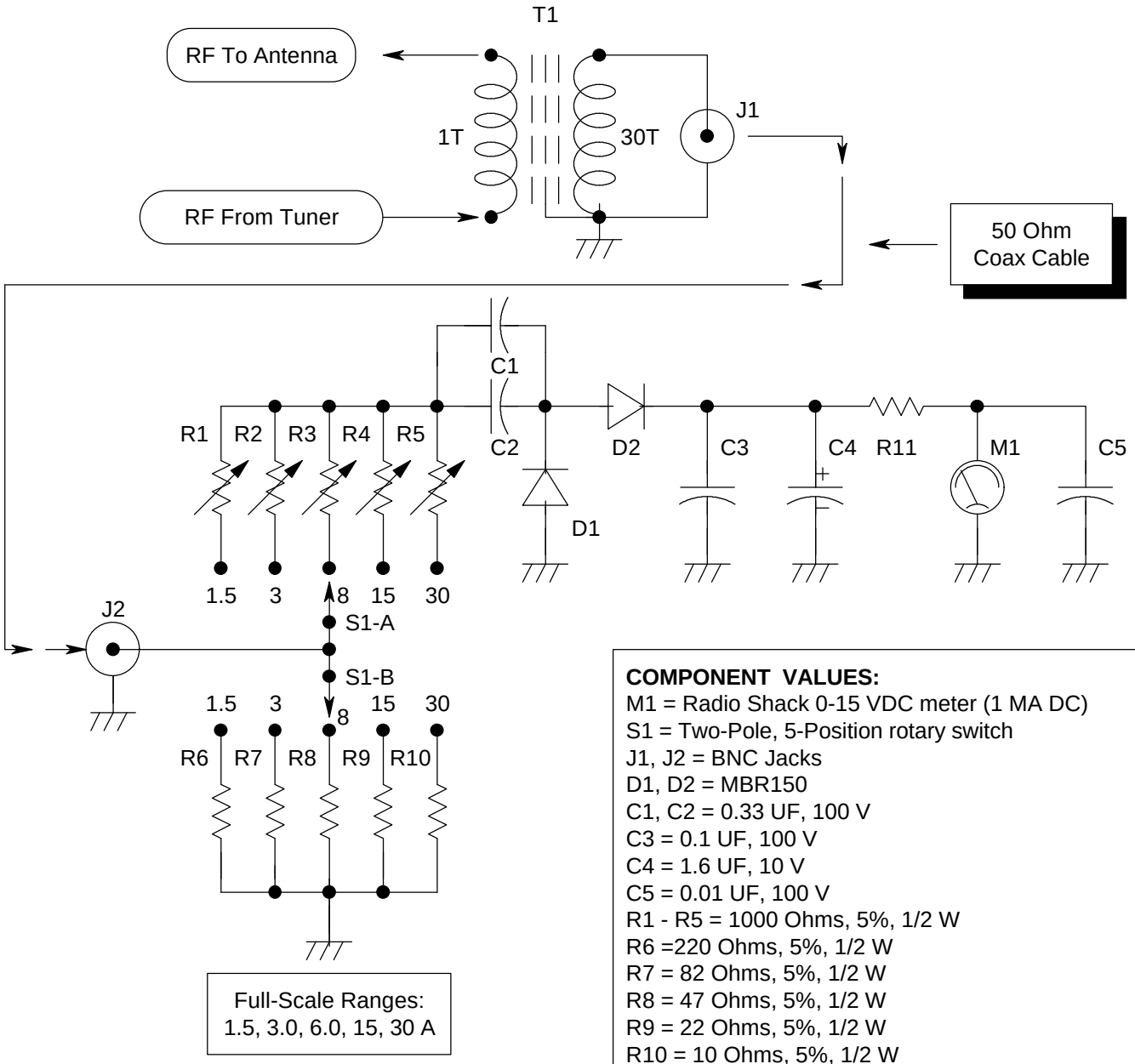
WC2XSR/13 - W5JGV
Multi-Range, High Voltage
RF Ammeter
by Spectrotek Services
10 AUG 02
file: RFA-1



COMPONENT VALUES:
M1 = Radio Shack 0-15 VDC meter (1 MA DC)
S1 = Two-Pole, 5-Position rotary switch
J1, J2 = BNC Jacks
D1, D2 = MBR150
C1, C2 = 0.33 UF, 100 V
C3 = 0.1 UF, 100 V
C4 = 1.6 UF, 10 V
C5 = 0.01 UF, 100 V
R1 - R5 = 1000 Ohms, 5%, 1/2 W
R6 =220 Ohms, 5%, 1/2 W
R7 = 82 Ohms, 5%, 1/2 W
R8 = 47 Ohms, 5%, 1/2 W
R9 = 22 Ohms, 5%, 1/2 W
R10 = 10 Ohms, 5%, 1/2 W
R11 = 10,000 Ohms, 5%, 1/2 W

RF CURRENT TRANSFORMER - T1
Core = CWS Bytemark T520-26 Iron Powder Torroid, 5.2" OD x 3.08" ID x 0.8" thick.
Primary = 1 turn of 3/8" soft drawn copper tube centered straight through the core. Insulate as required for high voltage.
Secondary = 30 turns #26 enameled copper wire, close wound, prepared as follows:
Apply one turn of adhesive backed Aluminum foil around the core where the secondary will be wound. Connect a ground wire to the foil. Cut a 1/16" section out of the foil so that it does not form a shorted turn around the torroid. Apply four layers of fiberglas insulating tape over the Aluminum foil. Wind 30 turns of #26 enameled copper wire close wound over the tape. Apply four layers of fiberglas insulating tape over the secondary winding. Apply one turn of adhesive backed Aluminum foil over the fiberglas tape. Conect a ground wire to the foil. Cut a 1/16" section out of the foil so that it does not form a shorted turn around the torroid.