



Note 1: Meter must be 200 uA full scale. In the case of a 50uA panel meter select values for Rt to obtain 1/3rd meter resistance. For the Western model 2031 panel meter used here the measured resistance was found to be 2384 Ohms thus the required shunt resistance is 795 Ohms. The combined resistance of the three shunt resistors and the meter in this case is 596 Ohms.

Note 2: Any general purpose RAIL-TO-RAIL opamp should work OK. Ensure to make corrections for the device pinout numbering if necessary.

Note 3: Initially adjust RV2 for a total resistance of 125K measured between pins 2 and 7 of U2. Finally using a calibrated 15 MHz signal source trim for exact 1dB per division response.

Note 4: Many alternative low power, low idle current LDO fixed 3.3V three terminal regulators could be used here. Use the proper C12/C13 capacitors specified for the device.

Note 5: A quicker meter response could be obtained by reducing the value of C11 to 1nF.

WIDE DYNAMIC RANGE RF FIELD STRENGTH METER - VA7TA -

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