Subject: Formulas
Posted by Wayne Parham on Sat, 24 May 2003 11:33:24 GMT
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You will need to use the formulas for calculating impedance and power through a reactive circuit, which isn't quite the same as pure resistance.  The formulas are in the "Pi Alignment Theory" document and in electronics textbooks.Impedance is found using reactive impedance

reactance, in ohmsXC is capacitive reactance, in ohmsF is frequency, in HertzL is inductance in Henries (so mH is H x 10 -3)C is capacitance in Farads (so uF is F x 10 -6)This will tell you the impedance of your coils and caps.If you know the voltage across a component and its impedance, you can calculate the power dissipated by the device using the formula P=E2/Z.  If you know the current flowing through a device, you can find power by using P=I2Z.  So find the reactive impedance of the device in question at the desired frequency, and substitute that for "Z."