
Subject: Re: ESL Bias Supply Filtering Update CORRECTION

Posted by [moray james](#) on Wed, 13 Jul 2005 21:17:19 GMT

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Hi Moray: The equation in my last e-mail for the resonant frequency is wrong. The following is the correct one. $f_r = 1 / ((2 * \pi) * (L * C)^{1/2})$ Sorry about the mix up. The Q of a tuned circuit is a function of the resistance. Generally it is the resistance of the chokes winding that controls the Q. Adding an external resistor will do the same thing. With that in mind it maybe that the bias resistance of 500 Megohms or the smaller 10 to 20 Megohms may make the circuit a low Q. In effect dampening out the resonant rise of the tuned elements. That sort of contradicts the statement in my last e-mail but it is a possibility. I would try the choke without the resistor to see what happens. Then add the resistor to see if it changes the Q of the circuit. Let me know what you find out. Ron
