Subject: impedance compensation,
Posted by Adam on Fri, 18 Jul 2003 14:53:37 GMT
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I had a question for you guys. My fuzzy memory recalls a circuit that will flatten the impedance spike at a driver's resonance frequency, as well as the impedance spike that appears just above tuning frequency in a ported enclosure. However, I don't remember anything about the circuit, or how to derive the appropriate component values.Can anyone help me out?Thanks!!Adam

Subject: Re: impedance compensation,
Posted by Wayne Parham on Fri, 18 Jul 2003 15:42:29 GMT
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You could certainly use tank circuits to compensate for the peaks caused by mechanical and Helmholtz resonances. But such a filter will also change overall system tuning, so you would need to look at that and analyze the system as a whole.Zobels and plain shunt resistance are dampers that will help with the tank circuit formed by interaction of the voice-coil and the crossover capacitors. They'll obviously have some effect on mechanical resonance too. But a Zobel will have very little effect because its impedance is high at low frequencies. And a shunt resistance will not damp mechanical resonance much either unless the value is prohibitively low.