

---

Subject: Spice revisited

Posted by [dbeardsl](#) on Mon, 11 Mar 2002 20:16:23 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

When generating a spice model for a linear motor, how do you calculate what to use to emulate the mechanical reactance.i.e. For the Beta 12. mechanical reactance is 50hz Q is 5.82. How would you calculate the appropriate component values?

---

Subject: Re: Spice revisited

Posted by [Wayne Parham](#) on Mon, 11 Mar 2002 21:47:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

To calculate the equivalent LCR electrical circuit for mechanical resonance, find  $Z_{max}$ , and set the shunt resistance equal to that. Then find inductance and capacitance values equal to the ( $Z_{max}$ ) resistance divided by the Q at the resonant frequency.

---

Subject: Re: Thanks! (nt)

Posted by [dbeardsl](#) on Mon, 11 Mar 2002 21:57:08 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

nt