

## Re: Loading Effect in Feedback

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.design/2004-12/1746.html>

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**From:** Zhiheng Cao ([cao\\_at\\_ece.utexas.edu](mailto:cao_at_ece.utexas.edu))

**Date:** 12/08/04

Date: Wed, 8 Dec 2004 14:36:04 -0600

Thanks for the pointer, but can one calculate terminal impedance modified by feedback using the Middlebrook's method? As far as I know that method is used to find out the open loop gain  $A_b$ .

"Jim Thompson" <[thegreatone@example.com](mailto:thegreatone@example.com)> wrote in message news:uv6er0t1b0lm0a258c2ml3o1cj55leigl@4ax.com...

> On Tue, 7 Dec 2004 20:09:52 -0600, "Zhiheng Cao" <[cao@ece.utexas.edu](mailto:cao@ece.utexas.edu)>

> wrote:

>

> > I am a student studying analog circuits and I am having hard time

> > understanding loading effect in feedback.

> >

> > Some books say when we cut the loop, we need to load

> > the output of the opamp with feedback network beta and the opamp input

> > behind it, but we can set the voltage (by the feedback) at the opamp

> > input using an ideal voltage source.

> >

> [snip]

> >

> > I am sorry if my explanation is too confusing.

> >

> > Thank you for reading my post.

> >

>

> Look up Middlebrook's method, where the loop is NOT broken.

>

> Then study the LOOPGAIN part on my website. The part implements the

> Middlebrook procedure for use in a Spice simulator.

>

> ...Jim Thompson

> --

> | James E.Thompson, P.E. | mens |

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