

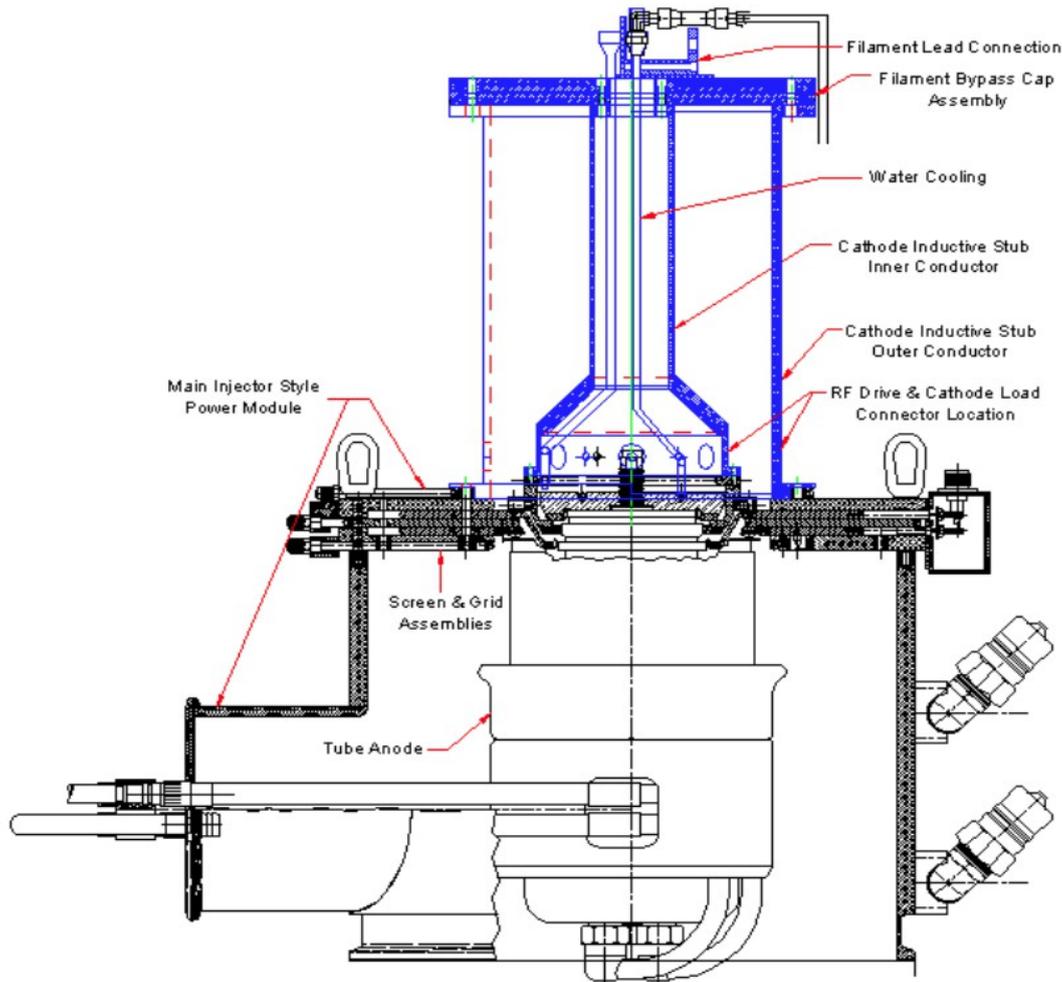
PA for 2nd Harmonic Cavity

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Reasons for working on the PA

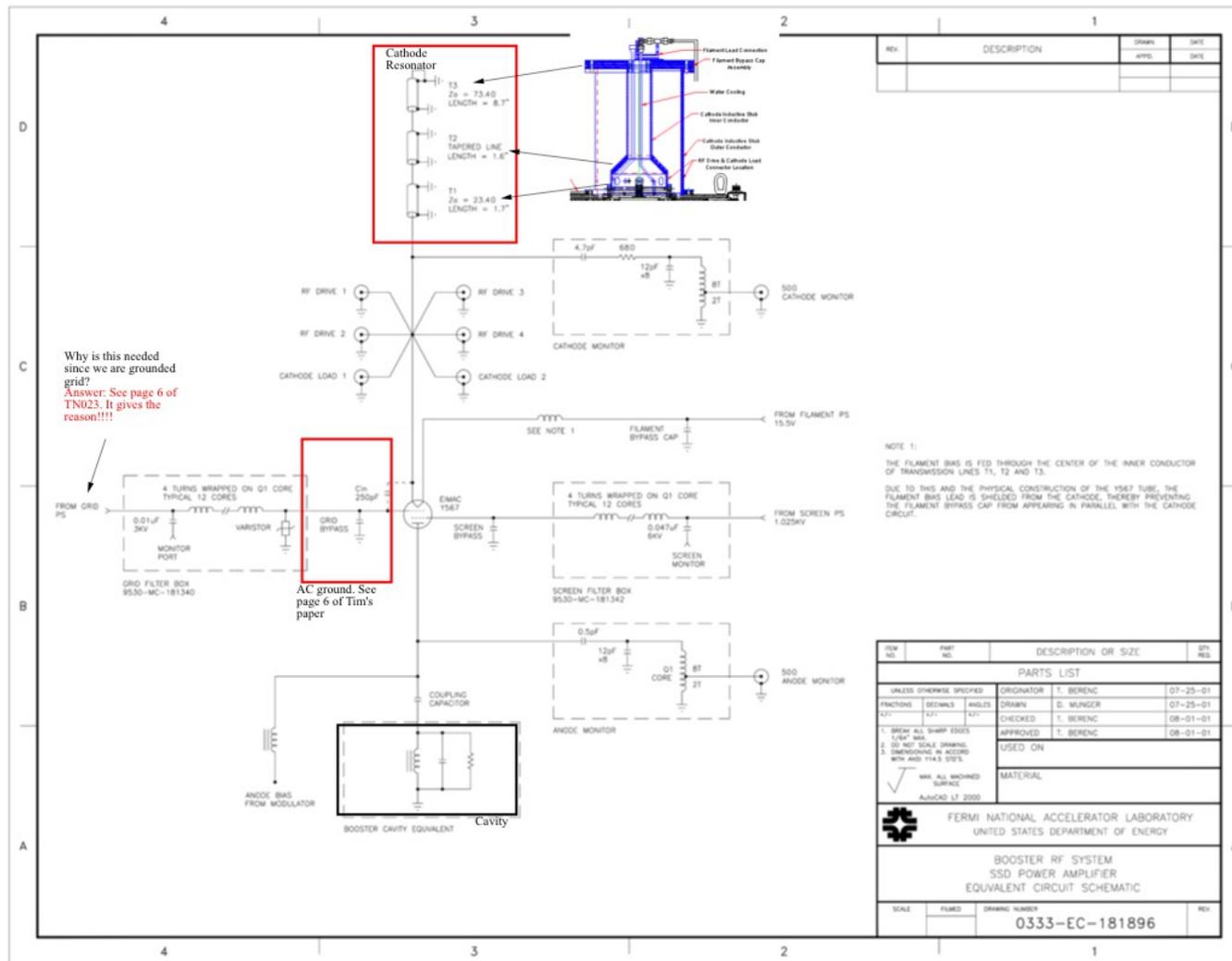
- After talking to John and Joe
 - Somebody needs to do it
 - John and Joe basically have no time to do this
 - Need to show that Y567 has enough power > 76 MHz
 - It will take a while to get the PA to work
 - I decided that it's best to start work now in parallel with the cavity work.

Need to understand and modify the cathode resonator



Plus 4 or 8 kW pre-amp for 75.5 to 105.6 MHz operation

Basis is Booster Solid State PA



Design is completely documented by Tim Berenc in TN023!
I have reproduced all the graphs in that paper.

Next step

- See what is needed to modify in order to get PA running at 75.5 MHz (76 MHz).
- See whether design is sufficient for PA to run at 105.6 MHz (106 MHz)
- Require both μ' and μ'' in order to calculate the correct cavity impedance.
- Should complete preliminary “design” on paper by the end of next week.
 - To be reviewed by Joe Dey.