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Subject: Re: AC filaments

Posted by [Steve](#) on Thu, 14 Apr 2005 17:33:49 GMT

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Good question Doug. Actually, virtually none. Grid current can start to flow when the grid is 0, or even a tenth or possibly a few tenths negative with respect to the cathode/filament. A lot depends on the tube condition. And only a very smallest part of the cathode/fil needs to be in this condition. Thus most of the cathode can be positive with respect to the grid and if a sliver of the cathode is near zero vs the grid, current will start to flow. The input Z will start to fall relatively rapidly. Of course, having an AC current will mean that the fil/cathode could be negative with respect to the grid during only a portion of the 60hz cycle. So the input Z could swing from near infinite to low during each 60hz cycle. Take care and hope this helps Doug. Steve

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