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Subject: Re: Practical limit to tube based phono preamps

Posted by [positron](#) on Fri, 13 Jan 2023 03:45:54 GMT

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Wayne Parham wrote on Wed, 11 January 2023 18:02

Interesting stuff. To me, that's the "holy grail" of tube amps.

Rare indeed is the tube amp that is dead black quiet between musical passages.

I thought I would do a little more research that might help..

The Vishay Z, S102, tx2352 resistors have approximately

10 nano-volts/volt across the resistor, current noise.

Another figure given is -40db. Expensive.

Mills non-inductive wire wounds equal or pretty close. Expensive

Metal films seem to Max out at 200 nanovolts/volt (0,2 microvolts/volt)

I do not know the average for all metal films. Based on 0,2, that would be approximately -14db.

Inexpensive.

Metal oxide inexpensive and

finally carbon types inexpensive. I saw figures of 10 microvolts/volt for carbons.

cheers

pos

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