

10.7.4 Rectifier tubes

Datasheets very rarely indicate the voltage drop across a rectifier tube in the forward- (flow-) direction, although the internal impedance of the power supply very significantly depends on this. Superficial consideration of such tables easily gives rise to the impression that the main criteria are limited to the maximum allowable voltage and current. **Fig. 10.7.6** shows how big the differences can be. Surprisingly, already the datasheet-information differs: a Philips-GZ34 of 1952-vintage is something entirely different than today's Philips-GZ34, and a modern 5Y3-GT has little in common with a 5Y3-GT built 50 years ago.

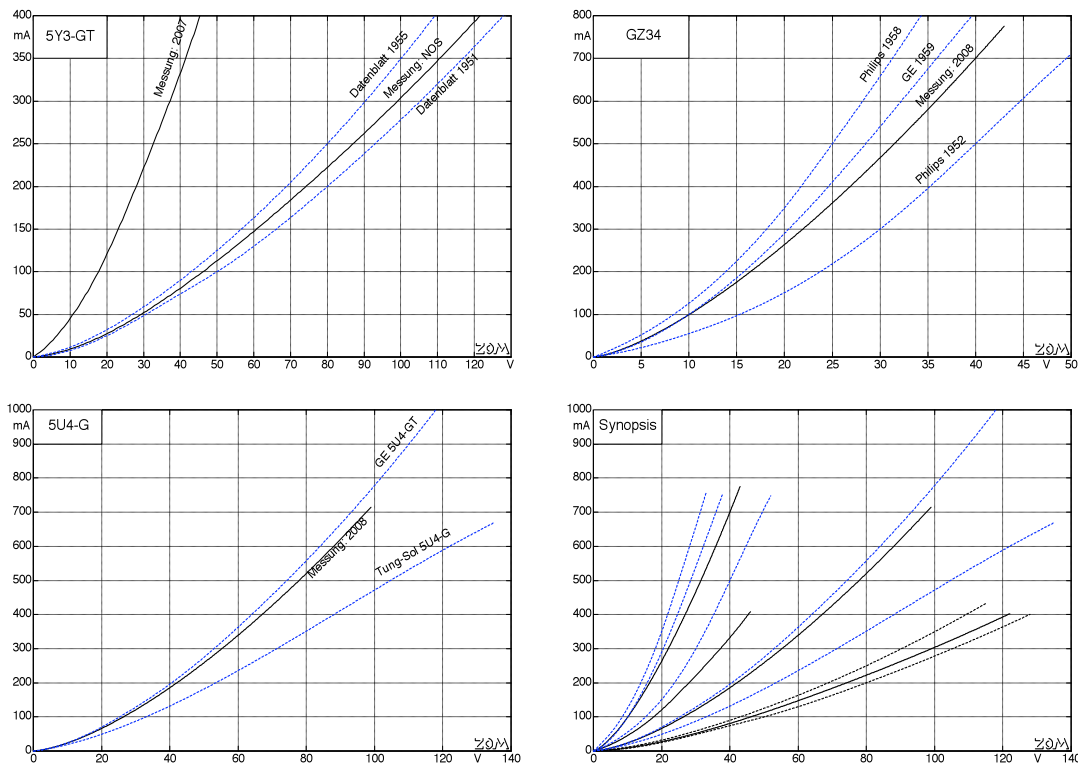


Fig. 10.7.6: Rectifier tubes operated in forward direction: U/I-diagrams.

Most tubes offered today have no binding **datasheets**; the reason is probably the following (as an imaginary example): expanding guitar wholesaler Pick-o-Might, Ltd.* decides to also carry tubes in the future. The sales assistant has projected colorful PPT diagrams including some very tasty pie charts, both the sales manager and the senior sales manager, plus in particular VP “Sales”, had euphorically agreed, and the chief exec had nodded. So, tubes it is. The order is commissioned with Mr. Li* (or Mr. Wu* or Mr. Ly-ing*); the logo (cost some serious dough to be put together by the designer) is included. 4 weeks later the first “our own – made by Pick-o-Might!”-tubes are delivered. In the meantime, the ad has been devised: “*A genuine GZ34 in its entire powerful glory*” and “*First-class, old-school-bulby GZ34: audibly sweeter sound – a reproduction of the classic Philips tube*”. Datasheet? Better not, cause if Messrs. Li*, Wu*, or Ly-ing* should some day not be able to deliver anymore, the order will quickly have to be redirected to Mr. Wassili* (or Mr. Wischnorschow* or Mr Slochisow*) – of course with the same logo. Datasheets would only tend to get in the way. Nastrowje!

* Any similarity to past, present of future names is purely circumstantial.