

operated with a larger anode voltage amplitude than is possible with a screened grid tetrode. Another result of the pentode construction is that it has been possible to produce valves having a very much higher amplification factor than any screened grid tetrode. For example the Mullard A.C. screened pentode, Type V.P. 4, has an amplification factor of approximately 5,000.

At the same time, it must be noted that the anode impedance of a screened pentode is much higher than that of a tetrode, so that the full advantage of the increased amplification factor can only be gained when the valve is used in conjunction with high efficiency couplings. Even with ordinarily efficient coils, however, a Mullard screened pentode will give a higher overall amplification than any screened grid tetrode, and can be substituted with advantage in any mains receiver now employing screened grid valves in the H.F. or detector stages.

Mullard screened H.F. pentodes intended primarily for H.F. amplification comprise types V.P. 4 for A.C. mains receivers (see page 22) and V.P. 20 for D.C. mains receivers (see page 48). Both have multi- μ characteristics and are therefore particularly suitable for use in the most modern circuits employing either manual or automatic gain control. The screened pentode can also

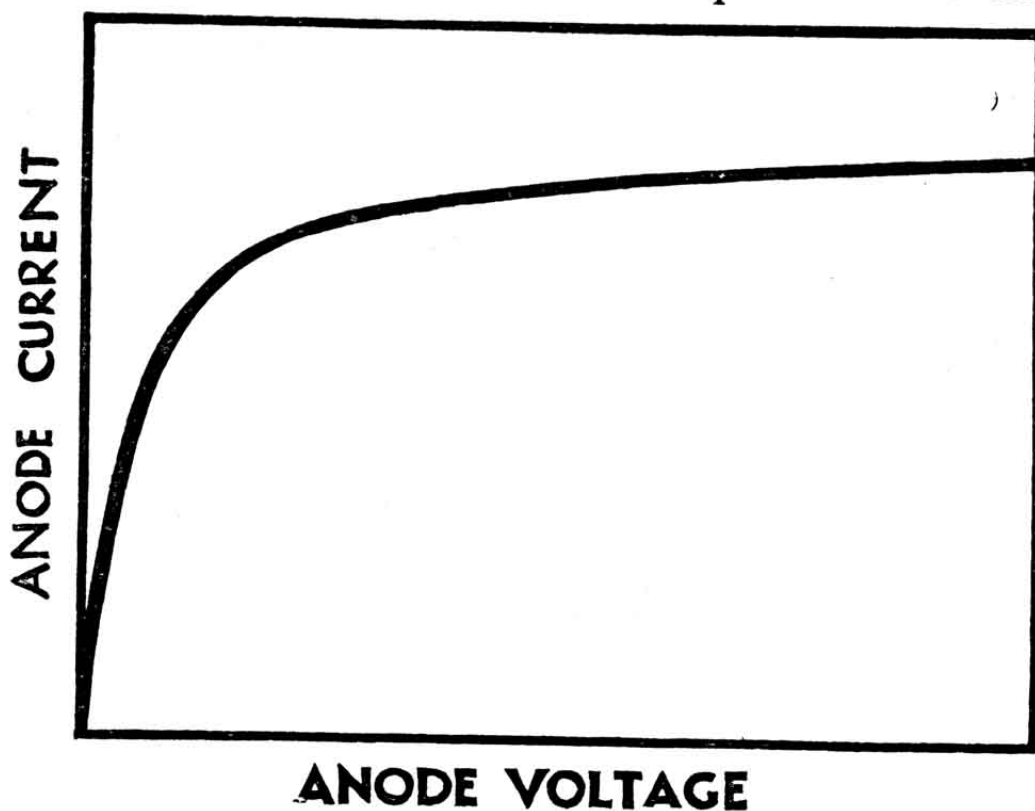


Fig. 2.

be used with outstanding success in super-heterodyne receivers, as first detector, or as frequency changer, and as detector in all types of receivers. Mullard H.F. pentodes more particularly suited for these applications are types S.P.4 for A.C. mains (page 23) and S.P.20 for D.C. mains (page 49).