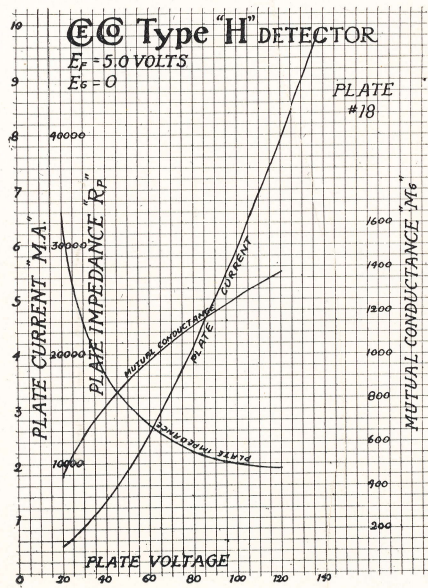
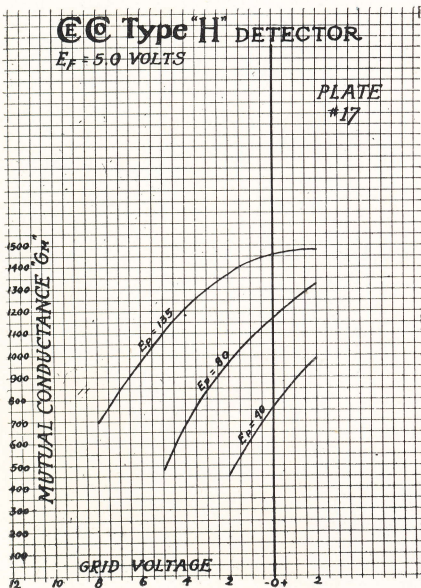
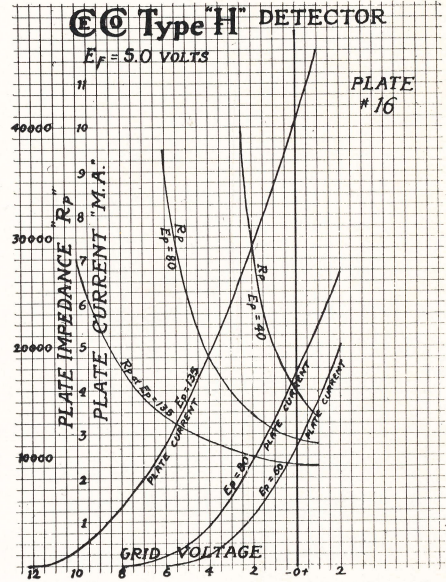


Characteristics of CeCo Tubes



CeCo Type H

Plate 16 shows the variation of plate current and impedance, with grid voltage, in the special CeCo Detector Tube. Note the curvature of the plate current-grid voltage curve, showing the great sensitivity of this tube when used as a detector without leak and condenser but with negative grid bias. This system of detection is of such excellent quality that it is found in the latest circuits, where the best reproduction and the sharpest tuning is needed. Its one drawback has been decreased sensitivity. The CeCo H type tube overcomes this, giving as great sensitivity with this method as with the more customary grid leak and condenser.

The great slope of these curves, however, also shows that improved sensitivity can be expected when the grid leak and condenser is employed, especially with about 80 volts on the plate.

The 135 volt curve shows the possibilities of this tube as an amplifier. At this voltage, with about 6 volts negative grid bias, amplification nearly double that of the A type may be obtained. This use of the tube is, however, usually confined to the stages preceding a power output tube such as type J71, which can handle the high voltages produced.

Finally, note the very low plate impedance at 80 volts, as compared with that of the usual detector tube, especially one of the gaseous type. This assures clear and distortionless reproduction with any modern amplifying system.

Plate 17 shows the exceptionally high mutual conductance of this type H, which with 80 volts on the plate is approximately 40% higher than the latest gaseous type detectors on the market, and manyfold times that of the usual alkali-metal detector. This makes for great volume, with less additional amplification needed.

Plate 18 shows especially the reduction in plate impedance to be gained by using 60 volts or more with this tube, with consequent lessened distortion.

The characteristic curves of this type cannot show the effect of the special internal construction, which prevents mechanical vibration of the elements—(microphonic noise) or the absolutely quiet background of reception assured by the perfect vacuum in conjunction with the above features. This tube is likewise non-critical in all its adjustments, as is shown by the even slope of the curves.