# Q.P.22A PENTODE FOR Q.P.P.

#### OPERATING DATA.

Filament Voltage		 	2.0 V.
Filament Current		 	0.45 A.
Max. Anode Voltage	• •	 	150 V.
Max. Aux. Grid Volta	age	 • •	150 V.
Optimum Load-			to all recognitions are a
(Anode to Anode)		 16,0	oo ohms.

### CHARACTERISTICS.

At Anode Volts 100; Auxiliary Grid Volts 100; Control Grid Volts Zero.

Mutual Conductance .. 4.0 mA/V.

#### APPLICATION.

The Q.P.22A comprises two matched power pentodes in a single bulb designed for use as a quiescent push-pull output stage in two-volt battery sets. The total quiescent current at various anode and auxiliary grid voltages, together with the recommended grid bias, are shown in the following table:

Anode and Aux. Grid Voltage.	Negative Grid Bias Voltages.	Total Quiescent Anode Current (mA).
150	13.5	4.0
135	12.0	2.5-3.0
120	10.5	2.5-3.0
100	9.0	2.5-3.0

In order that the two pentodes of the Q.P.22A may be completely matched, a system of grading has been instituted, the matching being effected by correct adjustment of auxiliary grid voltages.

To identify the two electrode assemblies of the valve the letters "A" and "B" are printed on the base in line with Pins 2 and 7 respectively.

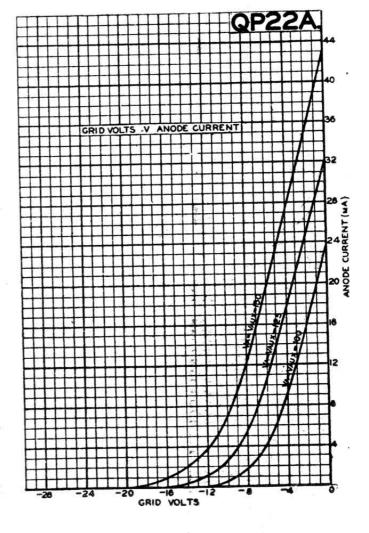
There are five grades and these are referred to by the letters "P," "Q," "R," "S" and "T." One of these letters will be found etched on each side of the bulb above the assembly identifying letters "A" and "B."

The H.T. battery should have five tappings at the higher voltage end to enable the specified auxiliary grid voltage to be used. With a 135 V.H.T. battery these tappings should be at 7½ volts, the maximum tapping being 1.5 volts lower than the maximum voltage of the battery. The grades are thus:

$$T = 133.5 \text{ V.}, S = 126.0 \text{ V.}, R = 118.5 \text{ V.}, Q = 111.0 \text{ V. and } P = 103.5 \text{ V.}$$

#### BASE.

Standard 9-pin. For connections see page 110.



## PRICE 17/6