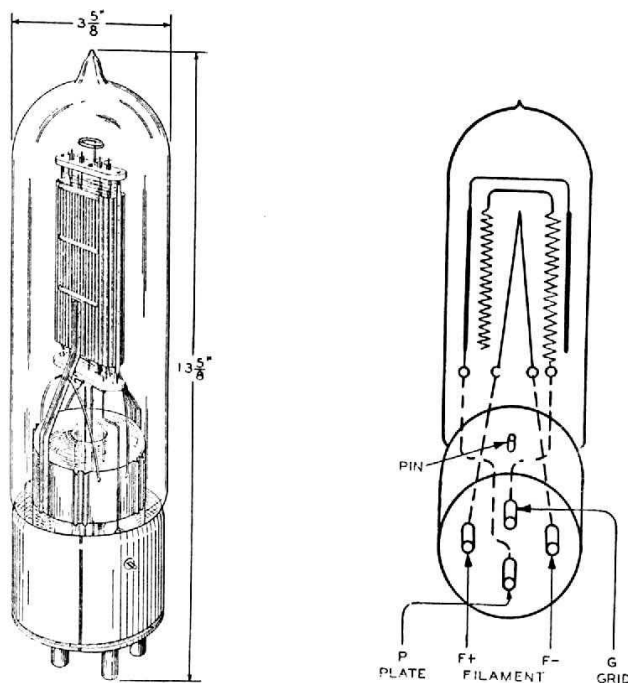


212-D Vacuum Tube

Used with Western Electric Vacuum Tube Socket No. 113-A.



USE—OSCILLATOR—MODULATOR

Normal filament current.....	6.0 ± 0.3 amperes
Normal filament voltage.....	14 volts
Normal plate current for plate voltage 1500 volts and grid voltage—60 volts...130 milliamperes	
Normal plate voltage.....	1000 to 1500 volts
Maximum safe plate voltage.....	2000 volts
Normal grid voltage.....	—30 to —80 volts
Normal plate to filament impedance under conditions: plate voltage 1500 volts, grid voltage—60 volts and plate current 130 milliamperes.....	2000 ohms
Maximum safe intermittent output.....	250 watts
Maximum safe continuous output.....	200 watts
Output as unmodulated oscillator.....	250 watts
Maximum instantaneous peak voltage between filament and plate.....	3000 volts
Inter-electrode Capacitances	
Grid to filament.....	19.0 mmf.
Grid to plate.....	19.0 mmf.
Plate to filament.....	12.4 mmf.
Amplification constant.....	15 to 17

With a plate voltage at 1500 volts, the grid potential at —60 volts and the filament voltage 14: the plate current will be as follows: (See note 1).

If marked No. 1	110-129 milliamperes inclusive		
“ “ No. 2	130-148	“	“
“ “ No. 3	149-167	“	“
“ “ No. 4	168-185	“	“

[OVER]

NOTE

1. This classification of tubes is not in any way a gradation of quality, but is only to facilitate parallel operation in the ordinary system using a common grid battery. It is essential to select tubes of the same or adjacent classes, in order that the load may be evenly distributed. When only single tubes are used no one of these classes has any advantage over the other.

2. This tube replaces the 212-A Tube and is interchangeable with it except that it operates at a lower filament current. It has a longer life. For maximum useful life, the filament voltage should be kept as low as possible to secure the desired output and should not exceed 14 volts, since an increase of 10% in the voltage may shorten the life by as much as 50%.

The discoloration of the bulb is due to a manufacturing process and has no effect on the operation of the tube.

3. The resistance variation in the filament used in the 212-D Vacuum Tube is small enough so that division into classes according to resistance is not necessary. On all apparatus equipped with compensating resistances, the flexible lead should be connected to "E."