

—Standard Valves—

4212-D
Valve

4212-D VALVE

TRIODE.

For replacement purposes only.

The 4212-D valve employs an oxidised nickel anode and has been replaced by the 4212-E valve.

SPECIFICATION.

Cathode.

Oxide coated filament.
Constant voltage type.

Base.

Extra large 4-pin bayonet.

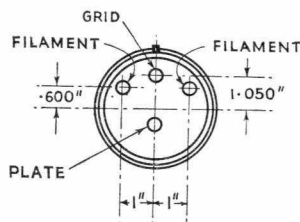
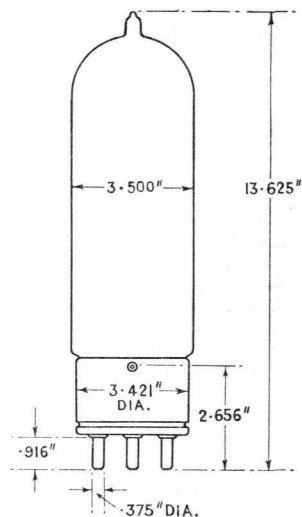
Dimensions.

Overall length $13\frac{5}{8}"$ (34.5 cms.)
Maximum diameter $3\frac{1}{2}"$ (8.9 cms.)
Net weight $1\frac{5}{8}$ lbs. (750 gms.)

Constants.

Filament voltage 14 volts
Nominal filament current 6 amps.
*Impedance 2,000 ohms
*Amplification factor 16
*Mutual conductance 8 mA. per volt
Grid-anode capacity $18.5 \mu\mu\text{F.}$
Anode-filament capacity $6 \mu\mu\text{F.}$
Grid-filament capacity $18.5 \mu\mu\text{F.}$

* at anode current of 130 mA.



LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	2,000 volts
Maximum direct anode current	300 mA.
Maximum anode dissipation	200 watts
Maximum direct grid current	75 mA.
Maximum frequency for above ratings	1.5 Mc.
Maximum anode voltage for frequency of 4.5 Mc.	750 volts

Note :—This valve should be mounted so that the filament is operated in a vertical plane.

V.4212-D.1
Nov. 1937

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TYPICAL OPERATING CONDITIONS.

	Class A AF Amp.
Direct anode voltage	1,500 volts
Grid bias	—67 volts
Direct anode current	130 mA.
Anode dissipation	150 watts
Load impedance	4,000 ohms
Undistorted output	45 watts

	Class B AF Amp. and Mod. For balanced 2 valve circuit		
Direct anode voltage	1,600	1,600	volts
Grid bias	—80	—70	to
	—100	—90	volts
Anode current per valve—zero signal	33	50	mA.
Anode current per valve—maximum signal	167	250	mA.
Anode dissipation	122	175	watts
Load resistance—anode to anode	8,000	6,000	ohms
Maximum output—2 valves	290	450	watts

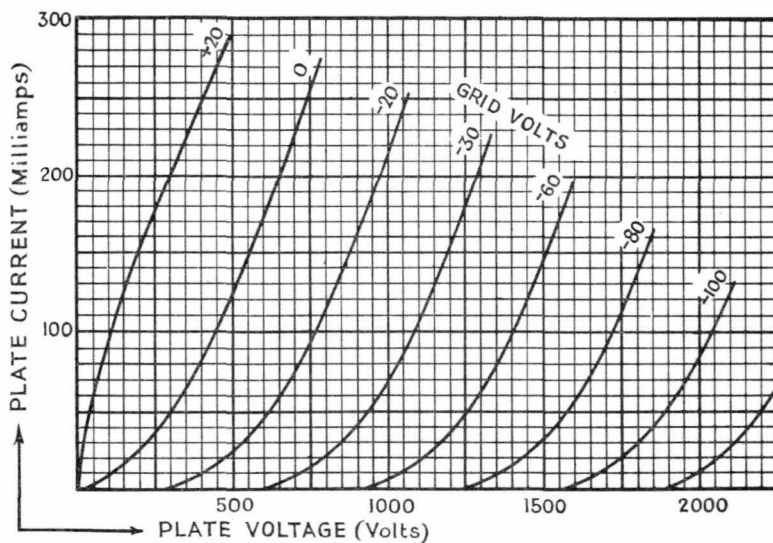
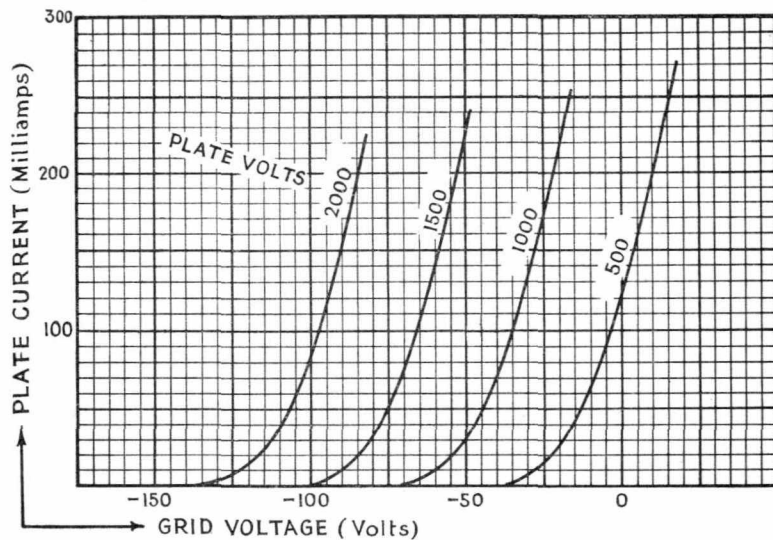
RADIO FREQUENCY OPERATION.

	Class B Telephony		Class C Telephony		Class C Telegraphy	
	Modulated Carrier applied to grid		Subject to anode modulation		Unmodulated	
Direct anode voltage	1,000	1,500	750	1,000	1,000	1,500 volts
Direct anode current	250	200	250	250	250	250 mA.
Grid bias	—50	—80	—100	—140	—140	—200 to
					—200	—300 volts
Anode dissipation	167	200	62	83	83	125 watts
Carrier output	83	100	125	167	167	250 watts

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These curves are taken with direct filament heating, grid and anode voltages being referred to negative end of filament.



PRINTED IN
ENGLAND