

# —Standard Valves—

## VALVE TYPE 3B/200-B

(Previously coded VLS.417-B valve).

TRIODE.

### SPECIFICATION.

#### Cathode.

Oxide coated filament.  
Constant voltage type.

#### Base.

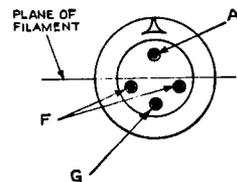
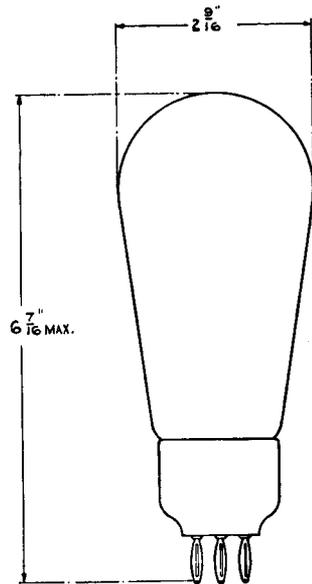
Standard British 4 pin.

#### Dimensions.

Max. Overall length  $6\frac{7}{16}$ " (16.3 cms.)  
Bulb diameter  $2\frac{9}{16}$ " (6.5 cms.)  
Net weight  $\frac{3}{8}$  lb. (170 gms.)

#### Constants.

Filament voltage 6 volts  
Nominal filament current 1.1 amps.  
\*Amplification factor 25  
\*Mutual conductance 5 mA.per volt  
\*Impedance 5,000 ohms.  
Grid-anode capacity  $9.9\ \mu\mu\text{F}$ .  
Grid-filament capacity  $7.5\ \mu\mu\text{F}$ .  
Anode-filament capacity  $5.7\ \mu\mu\text{F}$ .  
\* at  $V_p = 400$  volts,  $I_p = 50$  mA.



### LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	600 volts
Maximum anode dissipation	20 watts
Maximum direct anode current	135 mA.
Maximum frequency for above ratings	2 Mc.
Maximum direct anode voltage for frequency of 10 Mc.	500 volts

Tentative data

W.3B/200-B.1  
March, 1939

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## TYPICAL OPERATING CONDITIONS.

	Class B A.F. Amp. and Mod. For balanced 2 valve circuit.
Direct anode voltage	600 volts
Direct anode current per valve—zero signal	12 mA.
maximum signal	64 mA.
Grid bias	—17 volts
Load resistance—anode to anode	9,000 ohms
Peak A.F. grid to grid voltage	110 volts
Anode dissipation	17 watts
Power output—2 valves	40 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	600	450	600 volts
Direct anode current	50	67	75 mA.
Control grid bias	—20	—35	—50 to —75 volts
Anode dissipation	20	10	15 watts
Carrier output	10	20	30 watts

