

# —Standard Valves—

4006-A  
Valve

## 4006-A VALVE

SINGLE ENDED WATER COOLED TRIODE.

### SPECIFICATION.

#### Cathode.

Pure Tungsten Filament.  
Constant Voltage Type.

#### Water Jacket.

Type MS.1362 Grp. 1 for anode dissipation up to 6 Kw.

Type MS.1362 Grp.20 used for below panel connection for anode dissipation up to 6 Kw.

Type 223 LU 1A for anode dissipation over 6 Kw.

#### Water Flow.

5 gallons per minute.

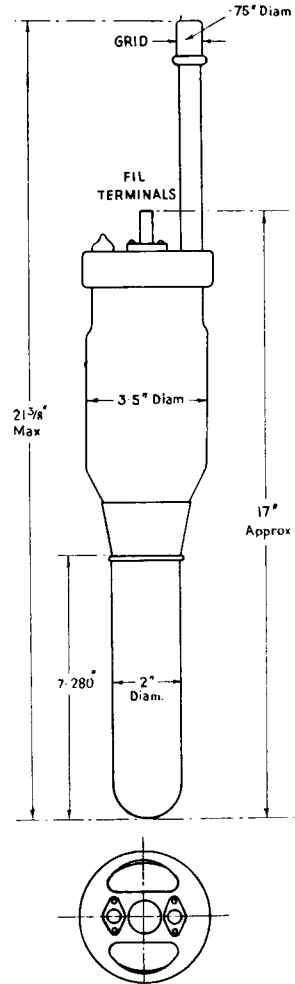
#### Dimensions.

Overall length  $21\frac{3}{8}"$  (54 cms.).  
Bulb diameter  $3\frac{1}{2}"$  (8.9 cms.).  
Net weight  $2\frac{1}{2}$  lb. (1,150 gms.)

#### Constants.

Filament voltage 19.5–20.5 volts  
(exact filament voltage marked on bulb)  
Nominal filament current 50 amps.  
Total emission 6 amps.  
\*Impedance 7,500 ohms.  
\*Amplification factor 40  
Grid–anode capacity 20.5  $\mu\text{F}$ .  
Anode–filament capacity 3  $\mu\text{F}$ .  
Grid–filament capacity 20  $\mu\text{F}$ .

\* at anode current of 0.75 amp.



### LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	13,000 volts.
Maximum direct anode voltage for anode modulation	9,000 volts.
Maximum direct anode current	1.5 amps.
Maximum anode dissipation	10 Kw.
Maximum grid dissipation	200 watts.
Maximum frequency for above ratings	3 Mc.
Maximum anode voltage for frequency of 6 Mc.	7,500 volts.

V.4006-A.1  
Nov. 1937

# —Standard Valves—

## TYPICAL OPERATING CONDITIONS

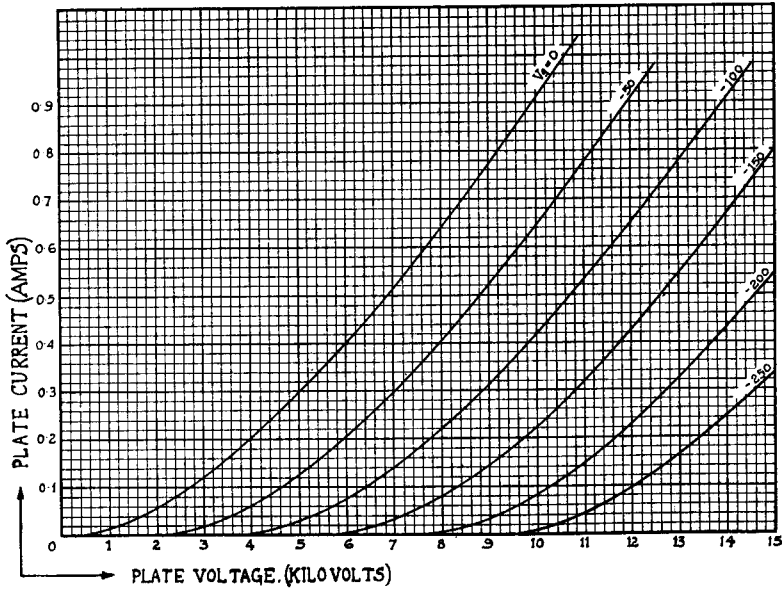
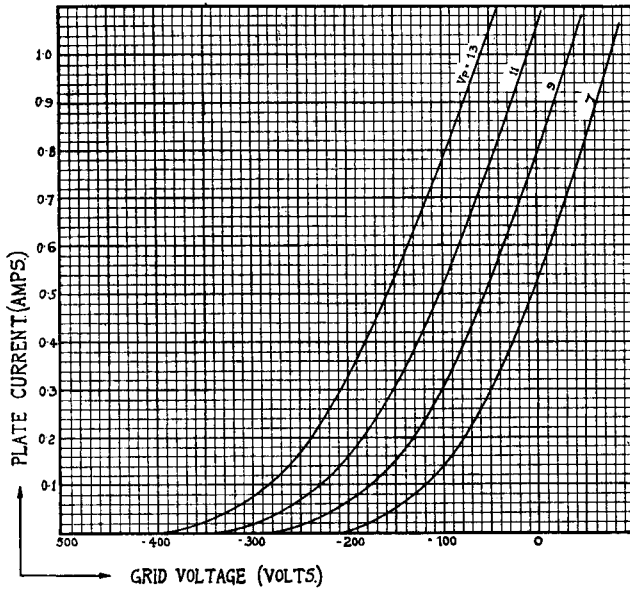
	Class B A.F. Amp. For balanced 2 valve circuit.
Direct anode voltage	10,000 volts
Grid Bias	—120 to —170 volts
Direct anode current per valve zero signal	0.25 amps.
Direct anode current per valve maximum signal	1.2 amps.
Load resistance—anode to anode	7,450 ohms.
Maximum signal output—2 valves	13.2 Kw.
Anode dissipation	5.4 Kw.

## 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	10,000	7,000	10,000 volts
Direct anode current	0.75	0.75	1.5 amps.
Grid bias	—210	—350	—500 to —700 volts
Anode dissipation	5	1.75	5 Kw.
Carrier output	2.5	3.5	10 Kw.

# —Standard Valves—

4006-A  
Valve



V.4006-A.2  
Nov. 1937

PRINTED IN  
ENGLAND