

# —Standard Valves—

4270-A  
Valve

## 4270-A VALVE

TRIODE.

### SPECIFICATION.

#### Cathode.

Thoriated Tungsten filament.  
Constant voltage type.

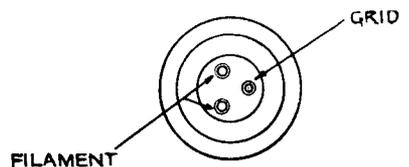
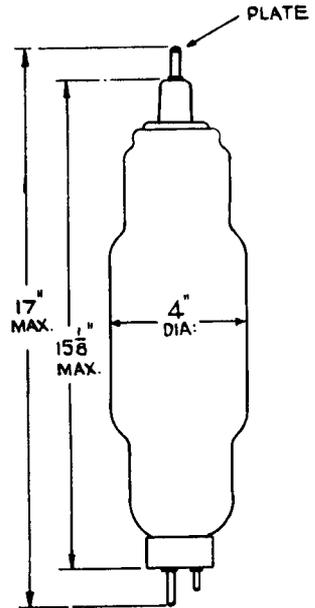
#### Dimensions.

Overall length 17" (43 cms.)  
Maximum diameter 4" (10.2 cms.)  
Net weight 1½ lbs. (600 gms.)

#### Constants.

Filament voltage 10 volts  
Nominal filament current 9.75 amps.  
Total emission 4.0 amps.  
\*Impedance 2,800 ohms  
\*Amplification factor 16  
Grid-anode capacity 21  $\mu\mu\text{F}$ .  
Anode-filament capacity 2  $\mu\mu\text{F}$ .  
Grid-filament capacity 18  $\mu\mu\text{F}$ .

\* at anode current of 0.12 amps.



### LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	3,000 volts
Maximum direct anode current	0.375 amps.
Maximum anode dissipation	350 watts
Maximum direct grid current	0.075 amps.
Maximum frequency for above ratings	7.5 Mc.
Maximum anode voltage for frequency of 22.5 Mc.	1,000 volts

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## TYPICAL OPERATING CONDITIONS.

	Class A A.F. Amp. or Mod.	
Direct anode voltage	2,500	2,000 volts
Grid bias	—130	—95 volts
Direct anode current	0.120	0.150 amps.
Anode dissipation	300	300 watts
Load impedance	15,000	10,000 ohms
Undistorted output	90	70 watts

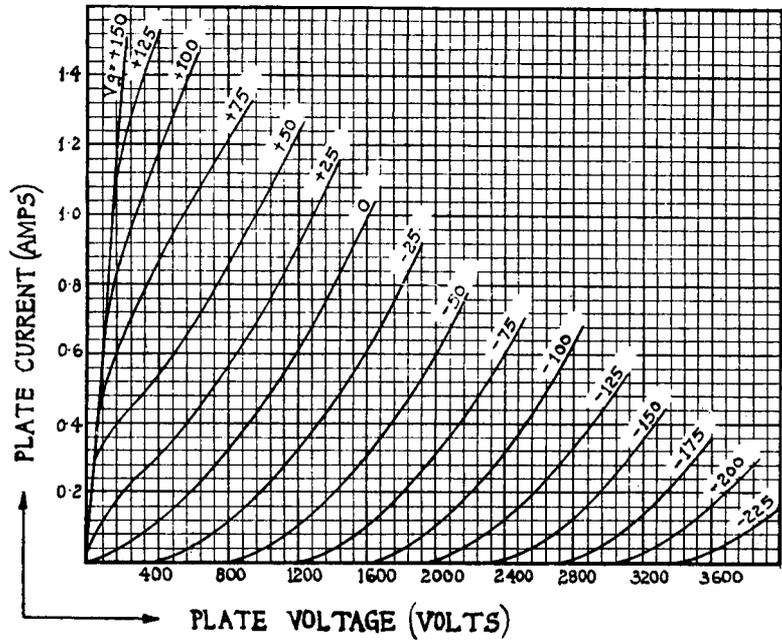
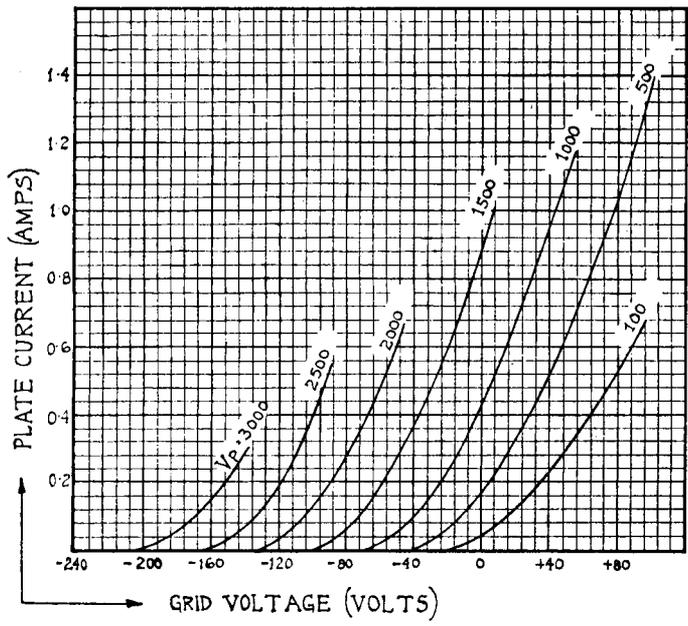
	Class B A.F. Amp. and Mod. For balanced 2 valve circuit	
Direct anode voltage	2,500	2,000 volts
Grid bias	—140	—105 volts
Anode current per valve—zero signal	0.060	0.060 amps.
Anode current per valve—maximum signal	0.375	0.375 amps.
Load resistance—anode to anode	8,000	6,000 ohms
Anode dissipation	350	350 watts
Maximum output—2 valves	1,000	850 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	3,000	2,500	2,250	1,750	3,000	1,750 volts
Direct anode current	0.175	0.210	0.300	0.350	0.350	0.350 amps.
Grid bias	—180	—140	—300	—240	—315	—225 to —420 —340 volts
Carrier output	175	175	450	410	700	585 watts
Anode dissipation	350	350	225	200	350	290 watts

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