4013-C VALVE

SINGLE ENDED WATER COOLED TRIODE.

SPECIFICATION.

Cathode.

Pure Tungsten filament.
Constant voltage type.

Water Jacket.

Type MS.1362 Grp. 1.
Type MS.1362 Grp. 20 used for below panel
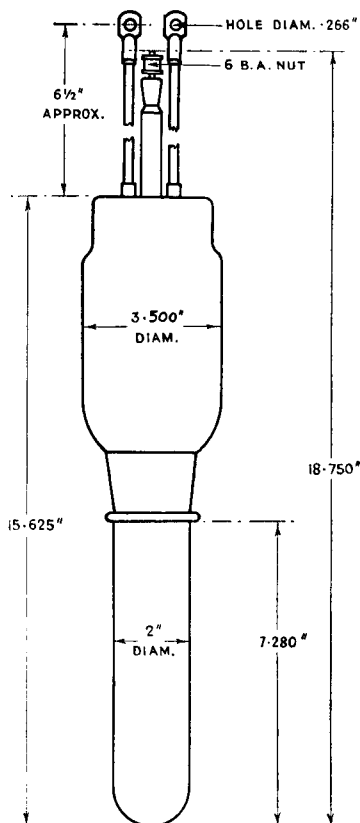connection.

Water Flow.

3 gallons per minute.

Dimensions.

Overall length	18¾″ (47·7 cms.)
Bulb diameter	3½″ (8·9 cms.)
Net weight	2½ lbs. (1,150 gms.)

Constants.

Filament voltage	13·5–14·5 volts
(exact filament voltage marked on bulb)	
Nominal filament current	36 amps.
Total emission	2·8 amps.
*Impedance	5,700 ohms.
*Amplification factor	21
Grid–anode capacity	18 $\mu\mu$F.
Anode–filament capacity	2 $\mu\mu$F.
Grid–filament capacity	14 $\mu\mu$F.

at anode current of 0·3 amp.

HOLE DIAM. ·266″
6 B.A. NUT
6½″ APPROX.
3·500″ DIAM.
18·750″
15·625″
2″ DIAM.
7·280″

LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage	6,000 volts
Maximum direct anode voltage for anode modulation	4,000 volts
Maximum direct anode current	0·7 amps.
Maximum anode dissipation	5 Kw.
Maximum grid dissipation	100 watts
Maximum frequency for above ratings	15 Mc.
Anode voltage for frequency of 22 Mc.	5,000 volts

—Standard Valves—

TYPICAL OPERATING CONDITIONS.

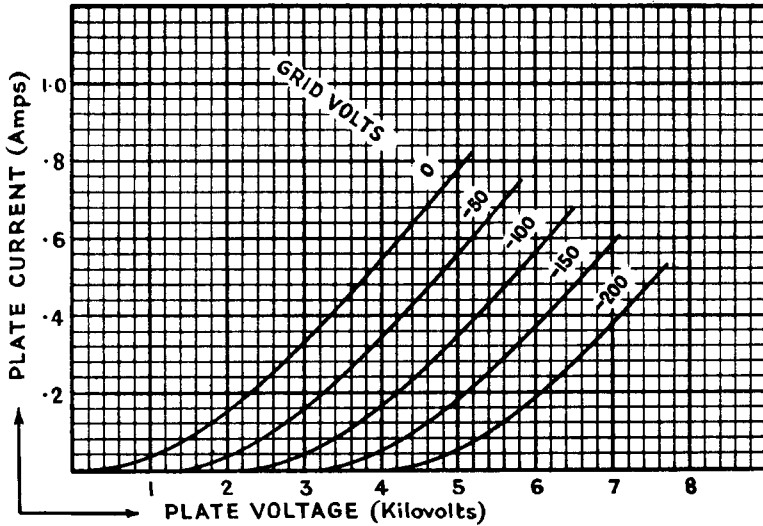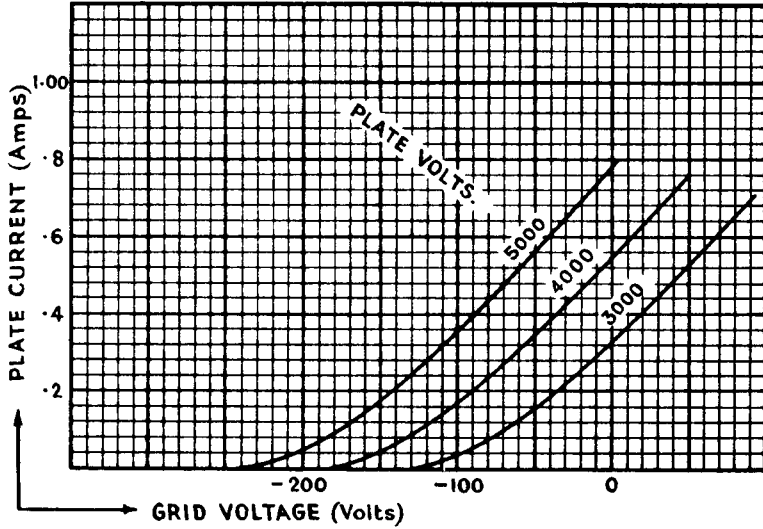|	Class B A.F. Amp. For balanced 2 valve circuit
Direct anode voltage	5,000 volts
Grid bias	—150 to —175 volts
Direct anode current per valve—zero signal	0·12 amps.
Direct anode current per valve—maximum signal	0·6 amps.
Load resistance—anode to anode	7,440 ohms
Maximum signal output—2 valves	3·3 Kw.
Anode dissipation	1·35 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	5,000	3,500	5,000 volts
Direct anode current	0·35	0·35	0·7 amps.
Grid bias	—200	—300	—500 to —700 volts
Anode dissipation	1·17	0·41	1·17 Kw.
Carrier output	0·58	0·82	2·34 Kw.

These curves are taken with A.C. filament heating, grid and anode voltages being referred to the centre point of the filament.