



# R.F. Beam Power Amplifier

## 5C/100A

### CATHODE.

Thoriated tungsten filament

Voltage	10	V
Nominal current	5	A
Peak emission	2.25	A

### RATING.

Mutual conductance	} Measured at $V_a$ 2kV, $V_g$ 400V, $I_a$ 50 mA } $V_a = V_g$ 400V, $I_a$ 50 mA }	3.3	mA/V
Screen grid $\mu$		10	

### INTER-ELECTRODE CAPACITIES.

Anode to grid	0.2	pF
Input	17.0	pF
Output	14	pF

### DIMENSIONS.

Maximum overall length	191	mm.
Maximum bulb diameter	66	mm.
Base : Large American 7-pin bayonet		
Net weight	240	g.

### MAXIMUM RATINGS.

Maximum direct anode voltage	2.0	kV
Maximum direct anode current	200	mA
Maximum anode dissipation	100	W
Maximum direct screen voltage	400	V
Maximum screen dissipation	15	W
Maximum Freq. for above Ratings	30	Mc/s

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## TYPICAL OPERATING CONDITIONS.

### RADIO FREQUENCY.

#### Class B Power Amplifier Telephony.

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	1.5	2.0	kV
Grid bias	-60	-75	V
Direct anode current	100	75	mA
Direct screen voltage	400	400	V
Direct screen current	4	3	mA
Peak RF grid voltage	70	80	V
Power output	50	50	W approx.

#### Class C Power Amplifier. Anode subject to modulation.

(Carrier conditions per valve for use with 100% modulation).

Direct anode voltage	1.25	1.6	kV
Grid bias	-120	-130	V
Direct anode current	150	150	mA
Direct screen voltage	400	400	V
Direct screen current	16	20	mA
Peak RF grid voltage	195	210	V
*Direct grid current	4	6	mA approx.
Power output	135	175	W approx.

#### Class C Power Amplifier or Oscillator, unmodulated.

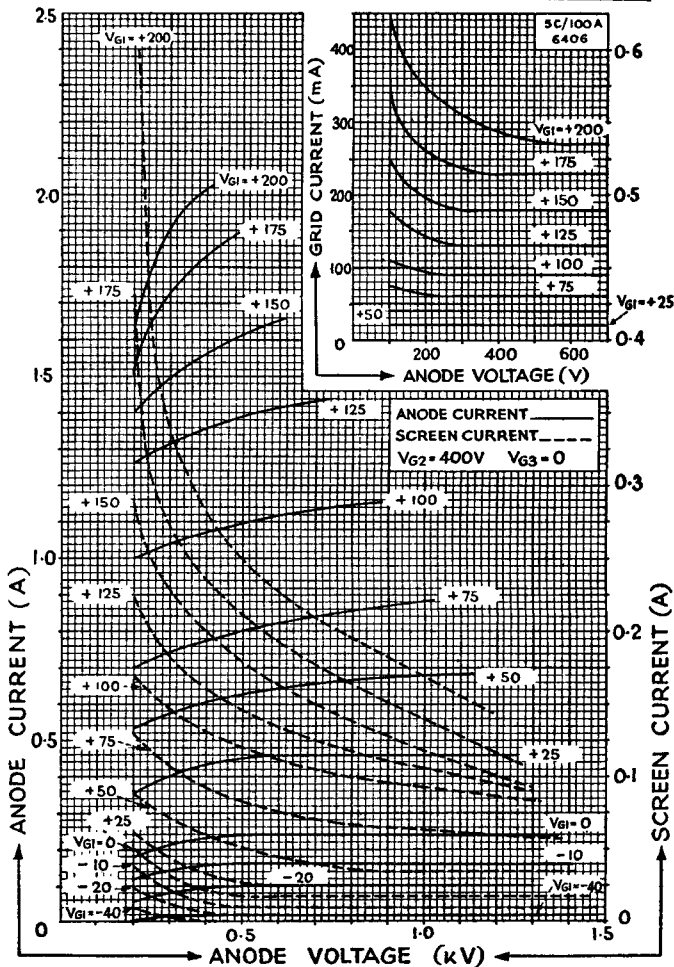
Direct anode voltage	2.0	kV
Grid bias	-90	V
Direct anode current	180	mA
Direct screen voltage	400	V
Direct screen current	15	mA
Peak RF grid voltage	160	V
*Direct grid current	3	mA approx.
Power output	260	W approx.

\*Subject to wide variation depending upon the impedance of the load circuit.



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