



860

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POWER TETRODE**GENERAL DATA****Electrical:**

Filament, Thoriated Tungsten:

Voltage	10	ac or dc volts
Current	3.25	amp

Transconductance, for plate current of 16 ma	1100	μ mhos
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Direct Interelectrode Capacitances:

Grid to Plate	0.08 max.*	μ mf
Input	7.75	μ mf
Output	7.5	μ mf

* With external shielding.

Mechanical:

Mounting Position Vertical, base down

Maximum Overall Length 8-3/4"

Maximum Radius 4-1/4"

Bulb GT-30, with arm

Base Medium-Metal-Shell Small 4-Pin, Bayonet

Basing Designation for BOTTOM VIEW 3F

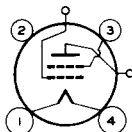
Pin 1-Filament

Pin 2-No

Connection

Pin 3-Screen

Pin 4-Filament



Top Lead-

Grid

Side Lead-

Plate

RF POWER AMPLIFIER - Class B Telephony

Carrier conditions per tube for use with a max. modulation factor of 1.0

Maximum Ratings, Absolute Values:

D-C Plate Voltage	3000 max.	volts
D-C Screen Voltage	500 max.	volts
D-C Plate Current	85 max.	ma.
Plate Input	150 max.	watts
Screen Input	10 max.	watts
Plate Dissipation	100 max.	watts

Typical Operation:

D-C Plate Voltage	2000	3000	volts
D-C Screen Voltage $\square$	300	300	volts
D-C Grid Voltage	-50	-50	volts
D-C Plate Current	60	43	ma.
Power Output	30	40	approx. watts

PLATE-MODULATED RF POWER AMPLIFIER - Class C Telephony

Carrier conditions per tube for use with a max. modulation factor of 1.0

Maximum Ratings, Absolute Values:

D-C Plate Voltage	2000 max.	volts
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 $\square$ Use of series screen resistor is not recommended.



POWER TETRODE

D-C Screen Voltage	500 max.	volts
D-C Grid Voltage	-800 max.	volts
D-C Plate Current	85 max.	ma.
D-C Grid Current	40 max.	ma.
Plate Input	170 max.	watts
Screen Input	6.7 max.	watts
Plate Dissipation	67 max.	watts

Typical Operation:

D-C Plate Voltage	1500	1800	2000	volts
D-C Screen Voltage [▲]	{ 60000	80000	100000	ohms
	{ 300	300	220	volts
D-C Grid Voltage ¶	{ 7500	7500	5300	ohms
	{ -225	-225	-200	volts
Peak R-F Grid Voltage	-	-	500	volts
D-C Plate Current	70	67	85	ma.
D-C Screen Current	-	-	25	ma.
D-C Grid Current **	30	30	38	<u>approx.ma.</u>
Driving Power **	15	15	17	<u>approx.watts</u>
Power Output	45	60	105	<u>approx.watts</u>

RF POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation †

Maximum Ratings, Absolute Values:

D-C Plate Voltage	3000 max.	volts
D-C Screen Voltage	500 max.	volts
D-C Grid Voltage	-800 max.	volts
D-C Plate Current	150 max.	ma.
D-C Grid Current	40 max.	ma.
Plate Input	300 max.	watts
Screen Input	10 max.	watts
Plate Dissipation	100 max.	watts

Typical Operation:

D-C Plate Voltage	1500	2000	2500	3000	volts
D-C Screen Voltage □	300	300	300	300	volts
D-C Grid Voltage •	{ 10000	10000	10000	10000	ohms
	{ -150	-150	-150	-150	volts
D-C Plate Current	90	90	90	85	ma.
D-C Grid Current **	15	15	15	15	<u>approx.ma.</u>
Driving Power **	7	7	7	7	<u>approx.watts</u>
Power Output	60	100	135	165	<u>approx.watts</u>

▲ Obtained from modulated plate-voltage supply through resistor or from modulated fixed supply.

¶ Obtained by grid-leak resistor or by partial self-bias methods.

† Modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.

** Subject to wide variations as explained on sheet TRANS. TUBE RATINGS.

□ Use of series resistor is not recommended.

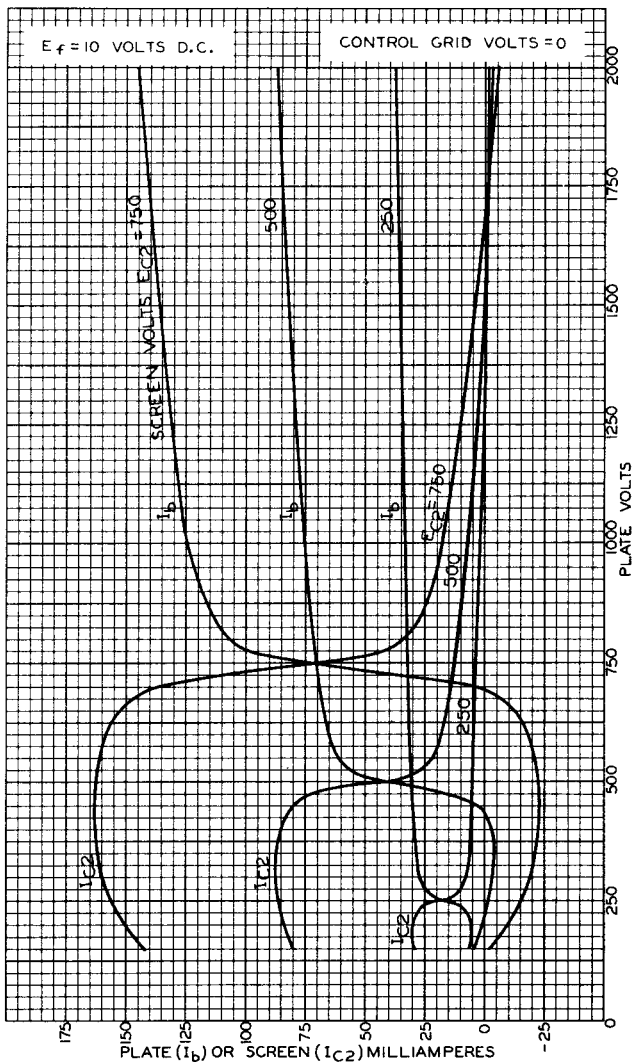
• Obtained by grid-leak resistor or other self- or fixed-bias method.



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AVERAGE PLATE CHARACTERISTICS

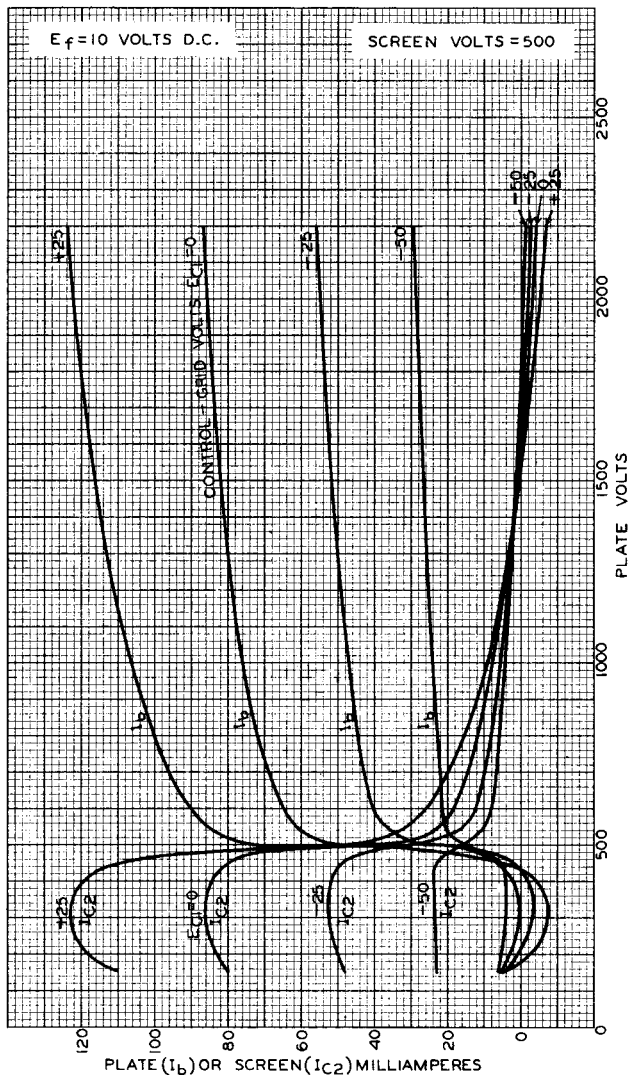


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AVERAGE PLATE CHARACTERISTICS



APR. 19/1934

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

925-5309

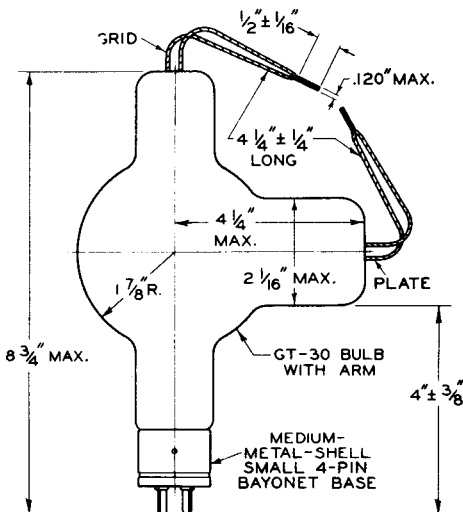


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POWER TETRODE

For use of the 860 at the higher frequencies, refer to sheet
TRANS. TUBE RATINGS vs FREQUENCY.



92CM-4318R4