860

POWER TETRODE

GENERAL DATA

Electrical:

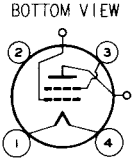
Filament, Thoriated Tungsten:		
Voltage	10	ac or dc volts
Current	3.25	amp
Transconductance, for plate current of 16 ma	1100	μmhos
Direct Interelectrode Capacitances:		
Grid to Plate	0.08 max.*	μμf
Input	7.75	μμf
Output	7.5	μμf

* 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 □	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

□ Use of series screen resistor is not recommended.

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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	approx.	ma.
Driving Power **	15	15	17	approx.	watts
Power Output	45	60	105	approx.	watts

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	approx.	ma.
Driving Power **	7	7	7	7	approx.	watts
Power Output	60	100	135	165	approx.	watts

▲ 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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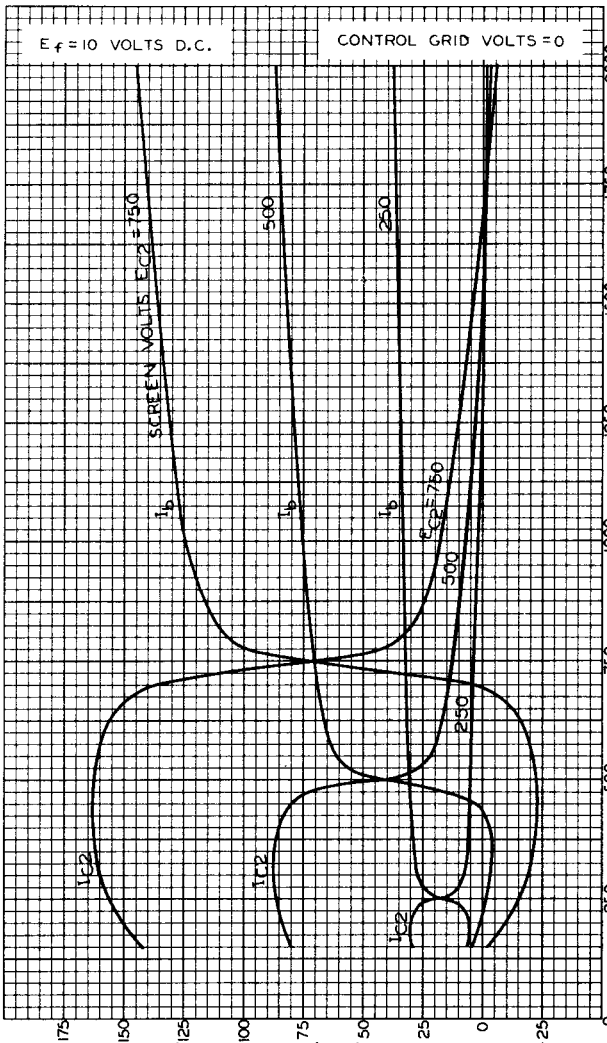
AVERAGE PLATE CHARACTERISTICS



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AVERAGE PLATE CHARACTERISTICS

APR. 19, 1934

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

925-5309

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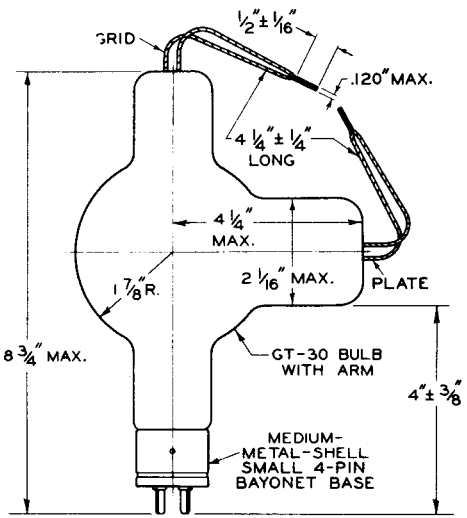
POWER TETRODE

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



92CM-4318R4

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY