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SCREEN GRID R-F POWER AMPLIFIER

Filament	Thoriated Tungsten	
Voltage	7.5	a-c or d-c volts
Current	2.0	amp.
Amplification Factor	150 approx.	
Mutual Conductance for plate current of 18 ma.	750	μmhos
Direct Interelectrode Capacitances:		
Grid to Plate	0.10*maximum	μμf
Input	8.5	μμf
Output	8.0	μμf
Maximum Overall Length		5-3/4"
Maximum Diameter		2-1/16"
Bulb		ST-16
Cap		Small Metal
Base		Medium 4-Pin Bayonet

MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS**R-F POWER AMPLIFIER—Class B (Telephony)***Carrier conditions per tube for use with a max. modulation fact. of 1.0*

D-C Plate Voltage	750 max.	volts
D-C Screen Voltage	175 max.	volts
D-C Plate Current	30 max.	ma.
R-F Grid Current	4 max.	amp.
Plate Input	22.5 max.	watts
Screen Input	3 max.	watts
Plate Dissipation	15 max.	watts

Typical Operation:

Filament Voltage	7.5	7.5	a-c volts
D-C Plate Voltage	500	750	volts
D-C Screen Voltage	125	125	volts
D-C Grid Voltage	-30	-30	volts
D-C Plate Current	30	22	ma.
D-C Grid Current	5	3	approx.ma.
Driving Power ° **	2	1.5	approx.watts
Power Output	3	4.5	approx.watts

° At crest of a-f cycle with modulation factor of 1.0.

PLATE-MODULATED R-F POWER AMPLIFIER—Class C Telephony*Carrier conditions per tube for use with a max. modulation fact. of 1.0*

D-C Plate Voltage	500 max.	volts
D-C Screen Voltage	175 max.	volts
D-C Grid Voltage	-200 max.	volts
D-C Plate Current	60 max.	ma.
D-C Grid Current	15 max.	ma.
R-F Grid Current	4 max.	amp.

* With external shielding.

** See next page.

(continued on next page)

SEPT. 30, 1936

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

DATA



SCREEN GRID R-F POWER AMPLIFIER

(continued from preceding page)

Plate Input		30 max.	watts
Screen Input		2 max.	watts
Plate Dissipation		10 max.	watts
Typical Operation:			
Filament Voltage	7.5	7.5	a-c volts
D-C Plate Voltage	375	500	volts
D-C Screen Voltage	125	125	volts
D-C Grid Voltage	-120	-120	volts
D-C Plate Current	50	40	ma.
D-C Grid Current **	11	9	approx.ma.
Driving Power **	3	2.5	approx.watts
Power Output	8.5	10	approx.watts

R-F POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation #

D-C Plate Voltage				750 max.	volts
D-C Screen Voltage				175 max.	volts
D-C Grid Voltage				-200 max.	volts
D-C Plate Current				60 max.	ma.
D-C Grid Current				15 max.	ma.
R-F Grid Current				5 max.	amp.
Plate Input				45 max.	watts
Screen Input				3 max.	watts
Plate Dissipation				15 max.	watts
Typical Operation:					
Filament Voltage	7.5	7.5	7.5	7.5	a-c volts
D-C Plate Voltage	375	500	625	750	volts
D-C Screen Voltage	125	125	125	125	volts
D-C Grid Voltage	-80	-80	-80	-80	volts
D-C Plate Current	55	50	45	40	ma.
D-C Grid Current **	11	9	6	5.5	<u>approx.ma.</u>
Driving Power **	2.5	2.0	1.2	1.0	<u>approx.watts</u>
Power Output	8.5	10	14	16	<u>approx.watts</u>

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

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

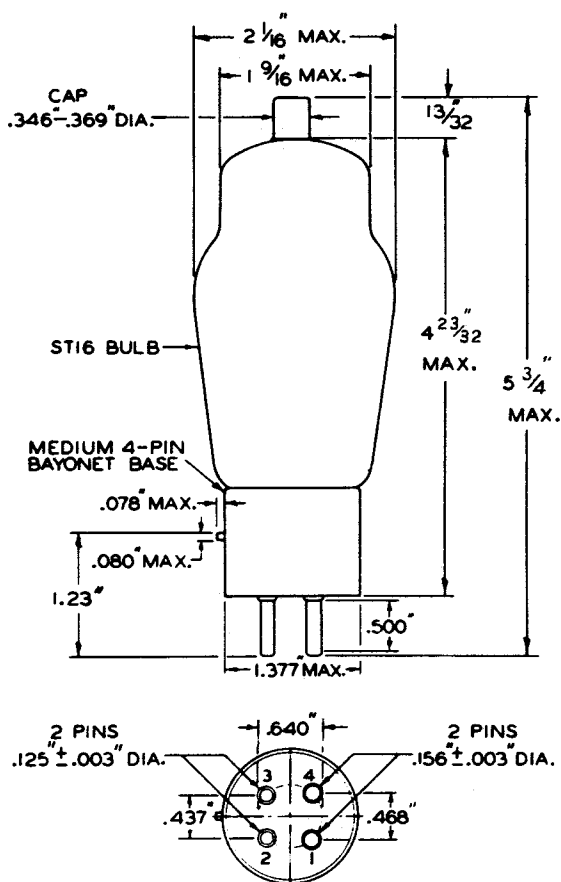
For use of the 865 at the higher frequencies, refer to sheet TRANS. TUBE RATINGS vs. FREQUENCY.



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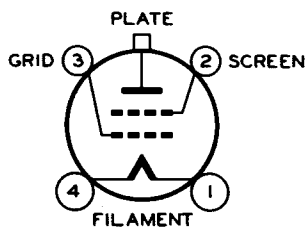
SCREEN GRID R-F POWER AMPLIFIER



BOTTOM VIEW OF BASE

92S-4272R3

TUBE SYMBOL & TOP VIEW
OF
SOCKET CONNECTIONS

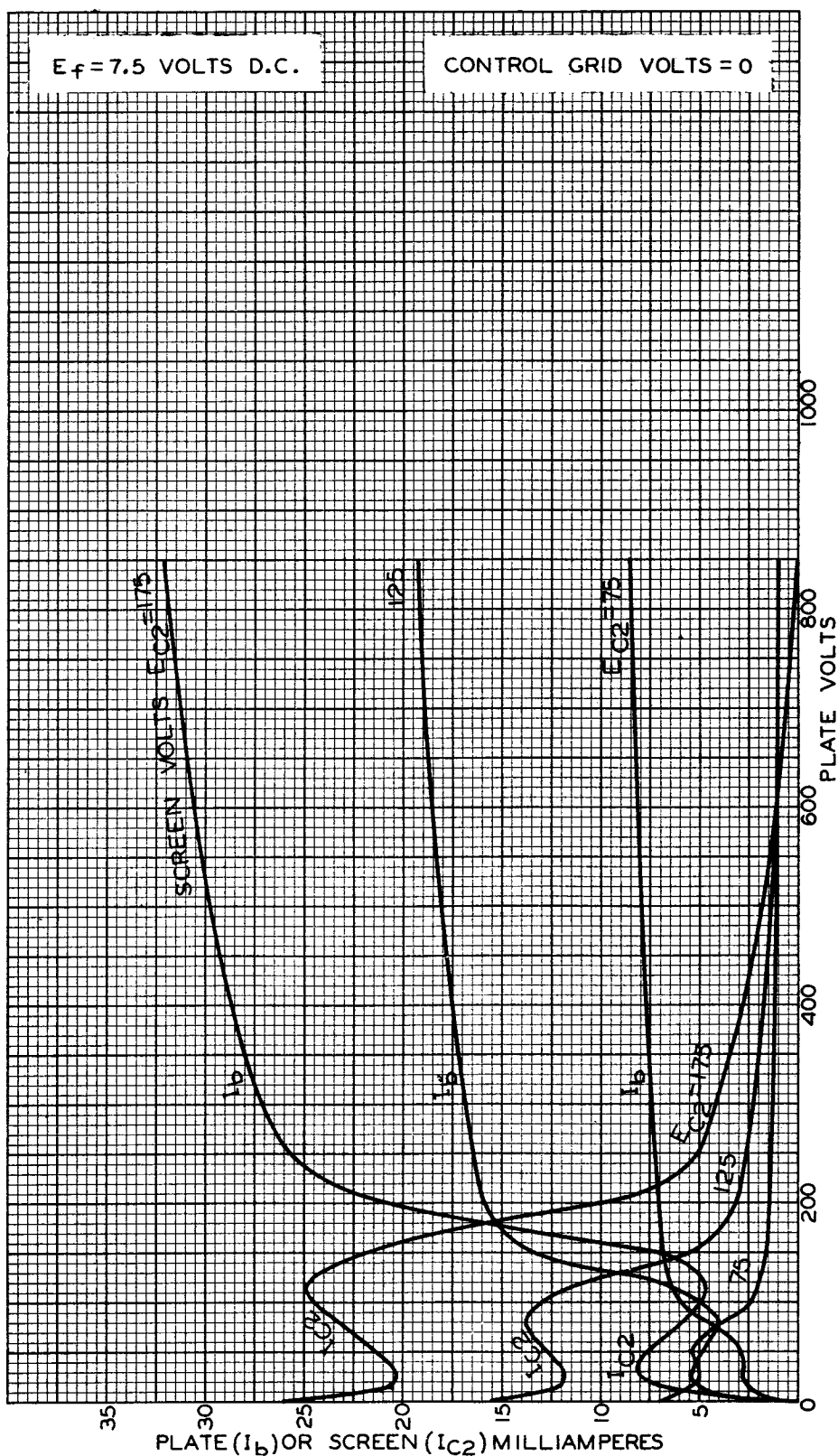


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AVERAGE PLATE CHARACTERISTICS



MAY 10, 1935

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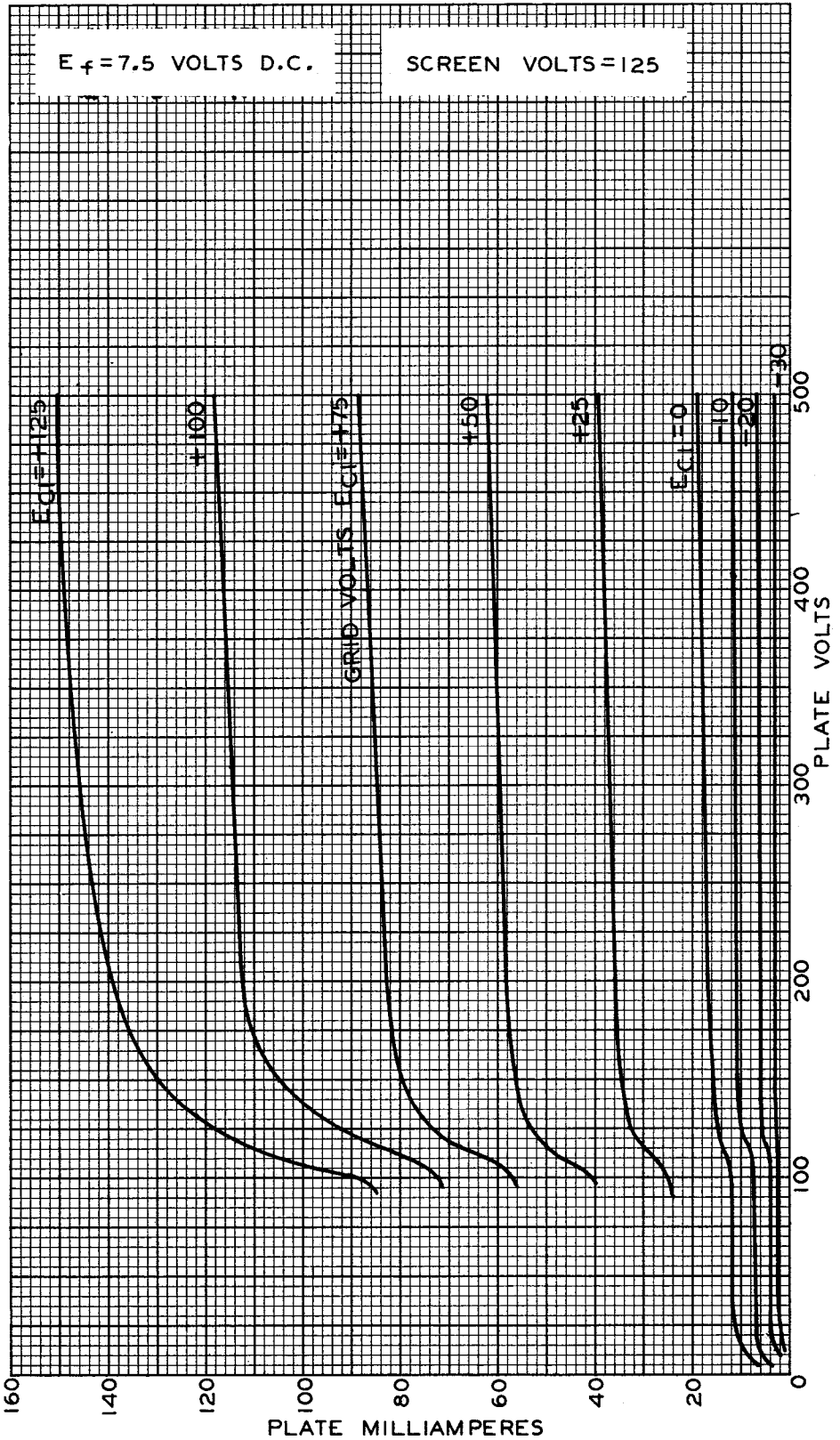
925-5498RI



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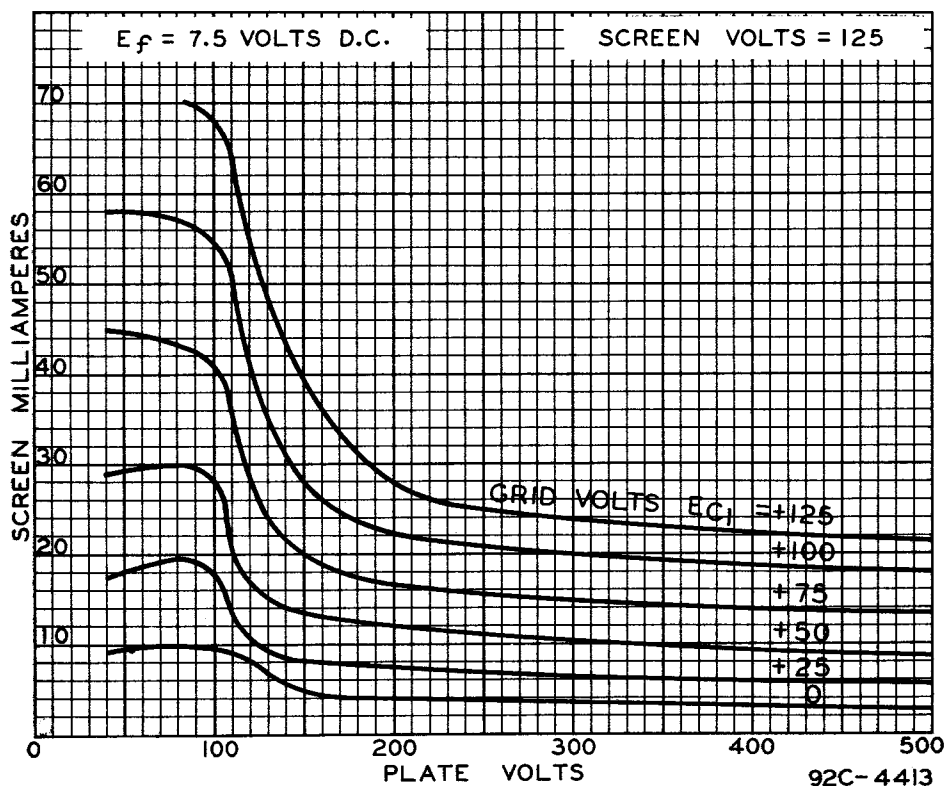
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AVERAGE PLATE CHARACTERISTICS





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