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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	μ hos
Direct Interelectrode Capacitances:		
Grid to Plate	0.10* maximum	μ f
Input	8.5	μ f
Output	8.0	μ f
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 CONDITIONSR-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 ^o **	2	1.5 approx. watts
Power Output	3	4.5 approx. watts

^o 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	30 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	approx.	ma.
Driving Power**	2.5	2.0	1.2	1.0	approx.	watts
Power Output	8.5	10	14	16	approx.	watts

** 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.

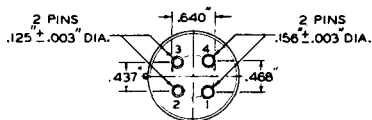
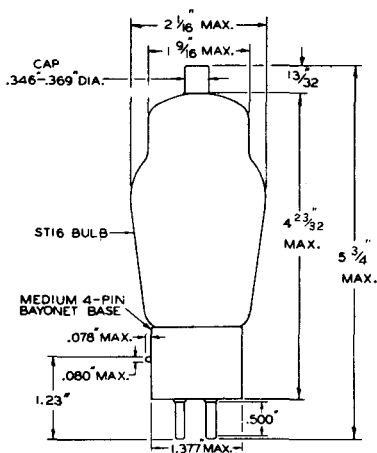
For use of the 865 at the higher frequencies, refer to sheet TRANS. TUBE RATINGS vs. FREQUENCY.



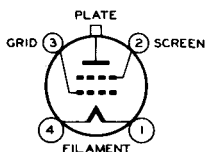
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SCREEN GRID R-F POWER AMPLIFIER

BOTTOM VIEW OF BASE

925-4272R3

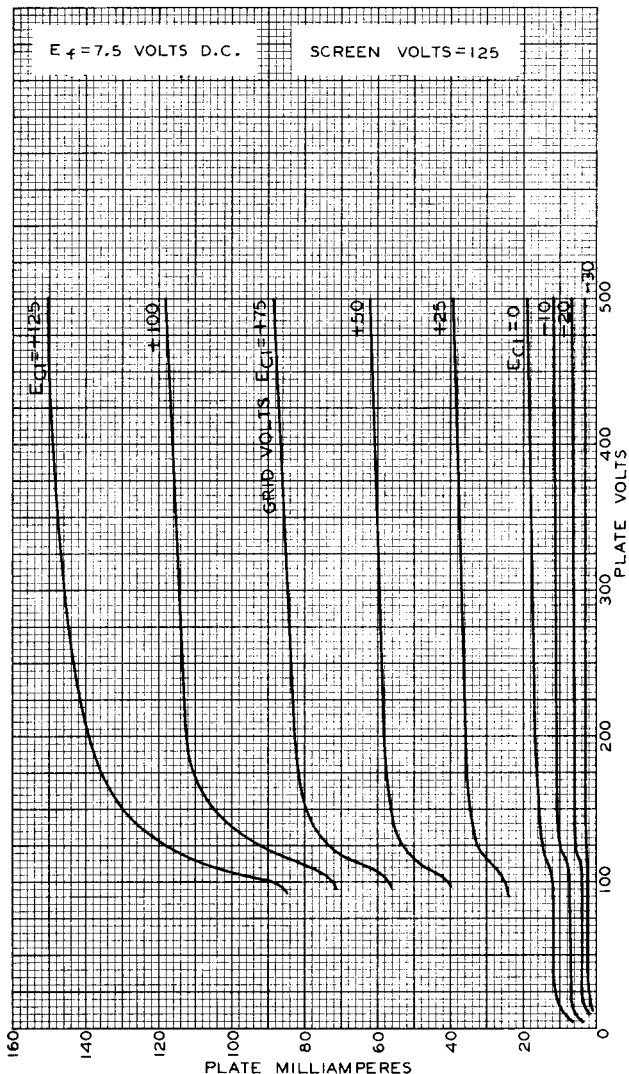
TUBE SYMBOL & TOP VIEW
OF
SOCKET CONNECTIONS



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AVERAGE PLATE CHARACTERISTICS



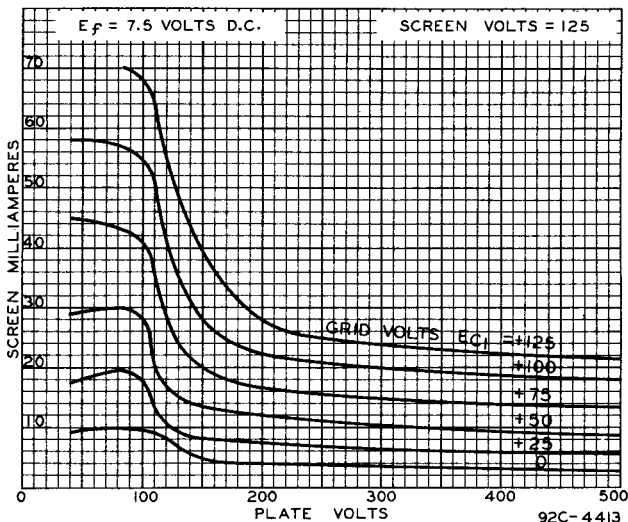
MAY 10, 1935

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AVERAGE CHARACTERISTICS



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