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**R-F POWER AMPLIFIER, OSCILLATOR**

Filament	Thoriated Tungsten	
Voltage	10	a-c or d-c volts
Current	3.25	amp.
Amplification Factor	12	
Direct Interelectrode Capacitances (approx.):		
Grid to Plate	2.6	μf
Grid to Filament	1.9	μf
Plate to Filament	1.0	μf
Maximum Overall Length		8-3/4"
Maximum Radius		4-1/4"
Bulb	GT-30 with arm	
Base	Medium 4-Pin Bayonet	

**A-F POWER AMPLIFIER & MODULATOR - Class B**

D-C Plate Voltage	3000 max.	volts
Max.-Sig. D-C Plate Cur.*	100 max.	ma.
Max.-Sig. Plate Input*	250 max.	watts
Plate Dissipation*	100 max.	watts
Typical Operation (2 tubes):		

*Unless otherwise specified, values are for 2 tubes.*

Filament Voltage	10	10	a-c volts
D-C Plate Voltage	2000	3000	volts
D-C Grid Voltage	-155	-250	volts
Peak A-F Grid Voltage	600	780	volts
Zero-Sig. D-C Plate Cur.	22	14	ma.
Max.-Sig. D-C Plate Cur.	180	160	ma.
Load Resistance (per tube)	5500	10250	ohms
Effective Load Res. (plate to plate)	22000	41000	ohms
Max.-Sig. Driving Power	3.5	3.5	approx.watts
Max.-Sig. Power Output	220	320	approx.watts

\* Averaged over any audio-frequency cycle.

**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	3000 max.	volts
D-C Plate Current	85 max.	ma.
R-F Grid Current	8.0 max.	amp.
Plate Input	150 max.	watts
Plate Dissipation	100 max.	watts
Typical Operation:		
Filament Voltage	10	10 a-c volts
D-C Plate Voltage	2000	3000 volts
D-C Grid Voltage	-155	-250 volts
Peak R-F Grid Voltage	200	225 volts
D-C Plate Current	60	43 ma.
D-C Grid Current**	1	0 approx.ma.
Driving Power °**	10	7 approx.watts
° Power Output	30	40 approx.watts

° At crest of a-f cycle

\*\* See next page. (continued on next page)

SEPT. 30, 1936

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## R-F POWER AMPLIFIER, OSCILLATOR

(continued from preceding page)

### 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	2000 max.	volts
D-C Grid Voltage	-800 max.	volts
D-C Plate Current	85 max.	ma.
D-C Grid Current	40 max.	ma.
R-F Grid Current	8.0 max.	amp.
Plate Input	170 max.	watts
Plate Dissipation	67 max.	watts

#### Typical Operation:

Filament Voltage	10	10	a-c volts
D-C Plate Voltage	1500	2000	volts
D-C Grid Voltage	-400	-500	volts
Peak R-F Grid Voltage	650	750	volts
D-C Plate Current	70	67	ma.
D-C Grid Current **	30	30	approx.ma.
Driving Power **	20	23	approx.watts
Power Output	45	75	approx.watts

### R-F POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down Conditions per tube without modulation\*

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

Typical Operation:

Filament Voltage	10	10	a-c volts
D-C Plate Voltage	2500	3000	volts
D-C Grid Voltage	-450	-600	volts
Peak R-F Grid Voltage	700	850	volts
D-C Plate Current	90	85	ma.
D-C Grid Current **	15	15	approx.ma.
Driving Power **	10	12	approx.watts
Power Output	135	165	approx.watts

\* 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.

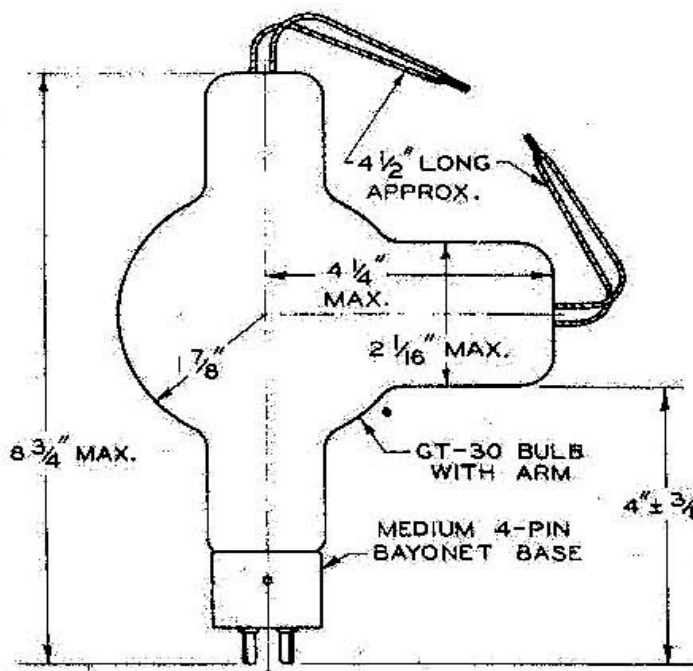
For use of the 852 at the higher frequencies, refer to sheet TRANS. TUBE RATINGS vs FREQUENCY



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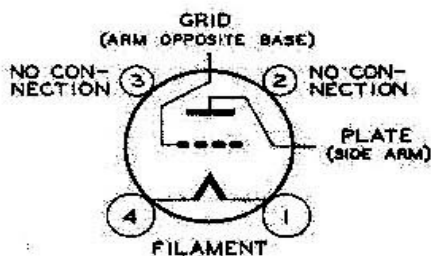
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# R-F POWER AMPLIFIER, OSCILLATOR



92S-4318R2

## TUBE SYMBOL & TOP VIEW OF SOCKET CONNECTIONS



## TUBE MOUNTING POSITION

VERTICAL: Base down  
 HORIZONTAL: No

JULY 1, 1938

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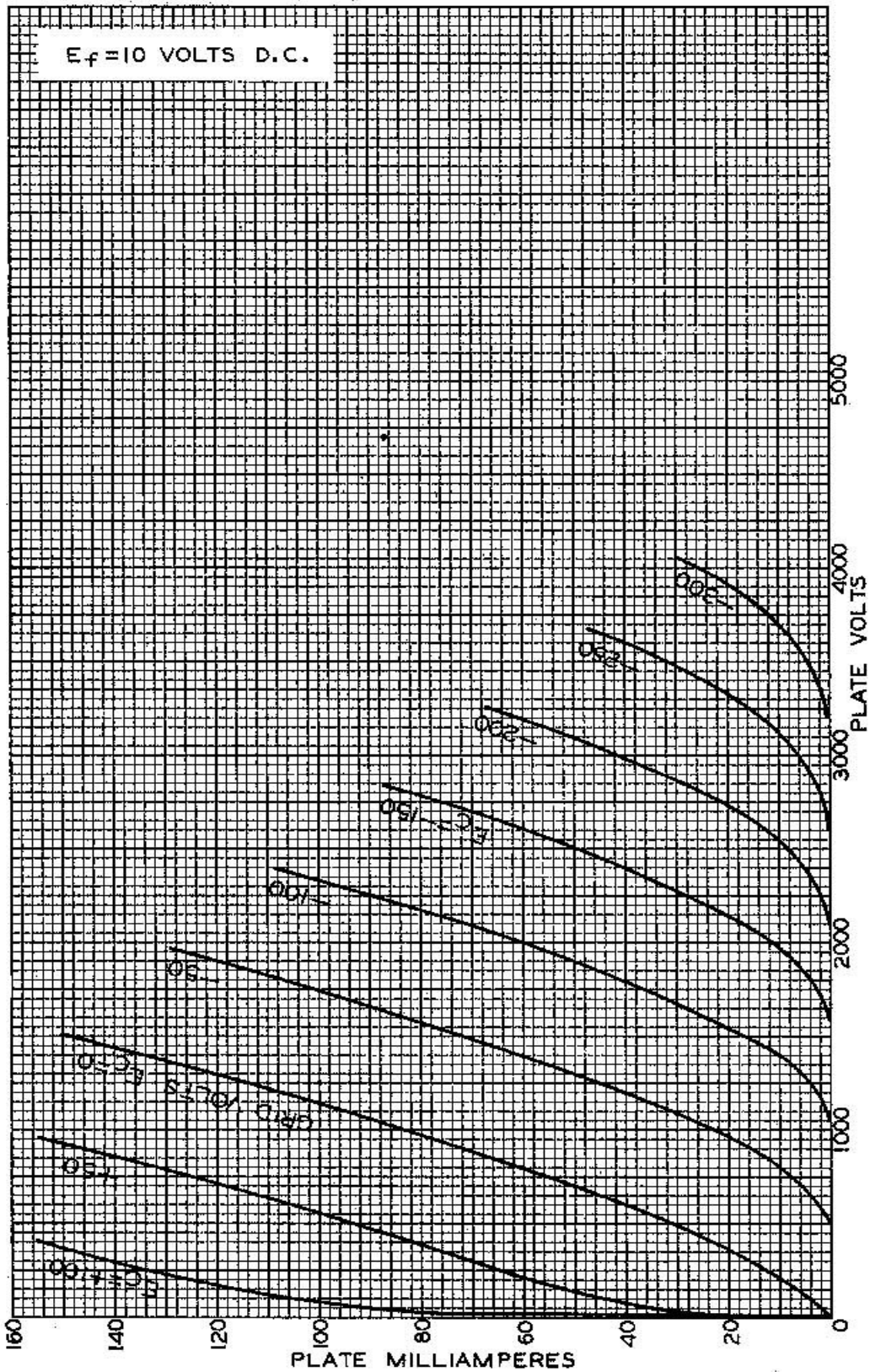
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### AVERAGE PLATE CHARACTERISTICS



MAR. 2, 1931

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92S-582R3