

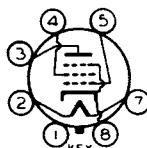


1613

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R-F POWER AMPLIFIER PENTODE

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.7	amp.
Transconductance for plate current of 31 ma.	2500	μ hos
Direct Interelectrode Capacitances:*		
Grid to Plate	0.26	μ f
Input	6.5	μ f
Output	13.5	μ f
Maximum Overall Length		3-1/4"
Maximum Seated Height		2-11/16"
Maximum Diameter		1-5/16"
Bulb		Metal Shell, MT-8
Base		Small Wafer Octal 7-Pin
Pin 1-Shell		Pin 5-Grid
Pin 2-Heater		Pin 7-Heater
Pin 3-Plate		Pin 8-Cathode,
Pin 4-Screen		Suppressor
Mounting Position		Any



BOTTOM VIEW (7S)

*Maximum Ratings Are Absolute Values***MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS****PLATE-MODULATED R-F POWER AMPLIFIER - Class C Telephony***Carrier conditions per tube for use with a max. modulation factor of 1.0*

D-C Plate Voltage	275 max.	volts
D-C Screen Voltage	275 max.	volts
D-C Grid Voltage	-100 max.	volts
D-C Plate Current	50 max.	ma.
D-C Grid Current	5 max.	ma.
Plate Input	11.5 max.	watts
Screen Input	2 max.	watts
Plate Dissipation	7 max.	watts
D-C Heater-Cathode Potential	100 max.	volts

Typical Operation:

D-C Plate Voltage	275	volts
D-C Screen Voltage ^Δ	200	volts
	7500	ohms
D-C Grid Voltage [□]	-35	volts
	12500	ohms
Peak R-F Grid Voltage	65	volts
D-C Plate Current	42	ma.
D-C Screen Current	10	ma.
D-C Grid Current	2.8 approx.	ma.
Driving Power	0.16 approx.	watt
Power Output	6 approx.	watts

[□] obtained by grid resistor or by partial self-bias methods.^Δ Preferably obtained from a separate source modulated with the plate supply, or obtained from the modulated plate-voltage supply through resistor of value shown.

* With shell connected to cathode.

← Indicates a change.

DEC. 1, 1943

RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA

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R-F POWER AMPLIFIER PENTODE

(continued from preceding page)

R-F POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation #

D-C Plate Voltage	350 max.	volts
D-C Screen Voltage	275 max.	volts
D-C Grid Voltage	-100 max.	volts
D-C Plate Current	50 max.	ma.
D-C Grid Current	5 max.	ma.
Plate Input	17.5 max.	watts
Screen Input	2.5 max.	watts
Plate Dissipation	10 max.	watts
D-C Heater-Cathode Potential	100 max.	volts

Typical Operation:

D-C Plate Voltage	350	volts
D-C Screen Voltage [■]	200	volts
	15000	ohms
D-C Grid Voltage [▲]	-35	volts
	10000	ohms
Peak R-F Grid Voltage	70	volts
D-C Plate Current	.50	ma.
D-C Screen Current	10	ma.
D-C Grid Current	3.5 approx.	ma.
Driving Power	0.22 approx.	watt
Power Output	9 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.

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

■ Obtained from a separate source, or from the plate-voltage supply with a voltage divider, or through a series resistor of the value shown.

Data on operating frequencies for the 1613 are given on the sheet TRANS. TUBE RATINGS vs FREQUENCY.

← Indicates a change.

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