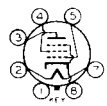
1613

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	μmhos
Direct Interelectrode Capacitances:®		
Grid to Plate	0.26	μμf
Input	6.5	μμf
Output	13.5	μμf
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, Suppressor
Pin 4 - Screen		
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△	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.
△ 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.

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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.

RCA VICTOR DIVISION
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