

DC GRID-No.2 VOLTAGE	300 max	300 max	volts
DC GRID-No.1 VOLTAGE	-125 max	-125 max	volts
DC PLATE CURRENT	110 max	110 max	ma
DC GRID-No.1 CURRENT	5 max	5 max	ma
PLATE INPUT	35 max	45 max	watts
GRID-No.2 INPUT	3.5 max	3.5 max	watts
PLATE DISSIPATION	21 max	25 max	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200 max	200 max	volts
Heater positive with respect to cathode	200 max	200 max	volts

Typical Operation:

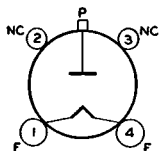
DC Plate Voltage	375	450	volts
DC Grid-No.2 Voltage*	250	250	volts
From series resistor of	12500	25000	ohms
DC Grid-No.1 Voltage†	-40	-45	volts
From grid-No.1 resistor of	20000	22500	ohms
From cathode resistor of	425	410	ohms
Peak RF Grid-No.1 Voltage	51	73	volts
DC Plate Current	80	100	ma
DC Grid-No.2 Current	10	8	ma
DC Grid-No.1 Current (Approx.)	2	2	ma
Driving Power (Approx.)	0.1	0.15	watt
Power Output (Approx.)	21	31	watts

Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

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

† Obtained from fixed supply, by grid-No.1 resistor, by cathode resistor, or by combination methods.

HALF-WAVE VACUUM RECTIFIER



Coated-filament type used in power supply of transmitting and industrial equipment. Maximum peak inverse plate volts, 6000; maximum average plate amperes, 0.13. Requires a

1616

Small four-contact socket and may be mounted in vertical position with base down, or in horizontal position with pins 1 and 4 in vertical plane. *OUTLINE 45, Outlines Section.*

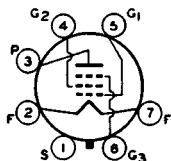
FILAMENT VOLTAGE	2.5 ± 10%	volts
FILAMENT CURRENT	5.0	amperes

HALF-WAVE RECTIFIER

Maximum Ratings:

PEAK INVERSE PLATE VOLTAGE	6000 max	volts
PLATE CURRENT:		
Peak	800 max	ma
Average	130 max	ma
Fault	2.5 max	amperes

BEAM POWER TUBE



Coated-filament type having metal shell used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 45 Mc. For operation at 60 Mc, plate voltage and plate input should be reduced to 90 per cent of maximum ratings; at 90 Mc, to 77 per cent. Requires Octal socket and may be mounted in vertical position only, base down or up. *OUTLINE 21, Outlines Section.* The 1619 is used principally for renewal purposes.

1619

RCA Transmitting Tubes

FILAMENT VOLTAGE (AC/DC)	2.5	volts
FILAMENT CURRENT	2.0	amperes
TRANSCONDUCTANCE (For plate current of 50 milliamperes)	4500	μ mhos
DIRECT INTERELECTRODE CAPACITANCES:		
Grid No.1 to plate	0.45 max	μ f
Grid No.1 to filament, grid No.3, grid No.2, and shell	9.6	μ f
Plate to filament, grid No.3, grid No.2, and shell	12.5	μ f

AF POWER AMPLIFIER AND MODULATOR—Class AB₁

Maximum CCS Ratings:

DC PLATE VOLTAGE	400 max	volts
DC GRID-NO.2 (SCREEN-GRID) VOLTAGE	300 max	volts
MAXIMUM-SIGNAL DC PLATE CURRENT [‡]	75 max	ma
MAXIMUM-SIGNAL PLATE INPUT [‡]	30 max	watts
GRID-NO.2 INPUT [‡]	3.5 max	watts
PLATE DISSIPATION [‡]	15 max	watts

[‡] Averaged over any audio-frequency cycle of sine-wave form.

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telephony[#] and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum CCS Ratings:

DC PLATE VOLTAGE	400 max	volts
DC GRID-NO.2 VOLTAGE	300 max	volts
DC GRID-NO.1 (CONTROL-GRID) VOLTAGE	-125 max	volts
DC PLATE CURRENT	75 max	ma
DC GRID-NO.1 CURRENT	5 max	ma
PLATE INPUT	30 max	watts
GRID-NO.2 INPUT	3.5 max	watts
PLATE DISSIPATION	15 max	watts

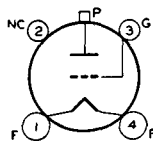
Maximum Circuit Values:

Grid-No.1-Circuit Resistance	25000 max	ohms
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[#] Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

POWER TRIODE

Thoriated-tungsten-filament type used as af power amplifier and modulator and as rf power amplifier and oscillator. May be used with full input up to 60 Mc and with reduced input up to 100 Mc. Requires Small four-contact socket and may be mounted in vertical position with base down, or in horizontal position with pins 1 and 4 in vertical plane. OUTLINE 40, *Outlines* Section. Plate does not show color when tube is operated at maximum CCS ratings. The 1623 is used principally for renewal purposes.



1623

FILAMENT VOLTAGE (AC/DC)	6.3	volts
FILAMENT CURRENT	2.5	amperes
AMPLIFICATION FACTOR	20	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	6.7	μ f
Grid to filament	5.2	μ f
Plate to filament	0.9	μ f

Maximum CCS Ratings:

	Class B Modulator	Class C Telephony [#]	
DC PLATE VOLTAGE	750 max	750 max	volts
DC GRID VOLTAGE	—	-200 max	volts
DC PLATE CURRENT	100 [•] max	100 max	ma
DC GRID CURRENT	—	25 max	ma
PLATE INPUT	75 [•] max	75 max	watts
PLATE DISSIPATION	25 [•] max	25 max	watts

[#] Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially neg-