

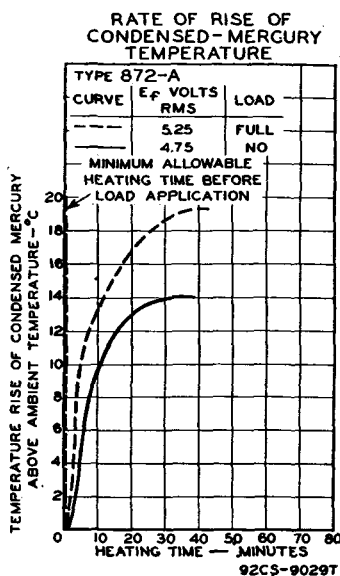
RCA Transmitting Tubes

Circuit (For circuit figures, refer to Rectifier Considerations Section)	Fig.	Max. Trans. Sec. Volts (RMS) E	Approx. DC Output Volts To Filter E _{av}	Max. DC Output Amperes I _{av}	Max. DC Output KW To Filter P _{dc}
Quadrature Operation					
Parallel Three-Phase.....	58	4000* 2000 ^Δ	4800 2400	7.5 7.5	36.0 18.0
Series Three-Phase.....	59	4000* 2000 ^Δ	9600 4800	3.75 3.75	36.0 18.0
Half-Wave Four-Phase....	60	3500* 1700 ^Δ	4500 2250	4.5* 5.0 [■] 4.5* 5.0 [■]	20.0* 22.5 [■] 10.0* 11.2 [■]
Half-Wave Six-Phase.....	61	3500* 1700 ^Δ	4800 2400	4.75* 5.0 [■] 4.75* 5.0 [■]	22.8* 24.0 [■] 11.4* 12.0 [■]

* For maximum peak inverse anode voltage of 10000 volts and maximum average anode current of 1.25 amperes.

^Δ For maximum peak inverse anode voltage of 5000 volts and maximum average anode current of 1.25 amperes.

* Resistive load. ■ Inductive load.



MEDIUM-MU TRIODE

Acorn heater-cathode type used as af amplifier and as rf amplifier and oscillator at frequencies up to 600 Mc. Class A₁ Amplifier maximum CCS plate dissipation (design-center value),

1.6 watts. Requires Acorn five-contact socket and may be mounted in any position. OUTLINE 2, *Outlines* Section. Plate shows no color when tube is operated at maximum CCS ratings.

HEATER VOLTAGE (AC/DC)	6.3	volts
HEATER CURRENT	0.15	ampere
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	1.3	μf
Grid to cathode and heater	1.0	μf
Plate to cathode and heater	0.4	μf

RCA Transmitting Tubes

AF AMPLIFIER—Class A₁

Maximum CCS Ratings, Design-Center Values:

DC PLATE VOLTAGE	250 max	volts
PLATE DISSIPATION	1.6 max	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	80 max	volts
Heater positive with respect to cathode	80 max	volts

Typical Operation and Characteristics:

DC Plate Voltage	90	135	180	250	volts
DC Grid Voltage	-2.5	-3.75	-5	-7	volts
Amplification Factor	25	25	25	25	
Plate Resistance (Approx.)	14700	13200	12500	11400	ohms
Transconductance	1700	1900	2000	2200	μmhos
DC Plate Current	2.5	3.5	4.5	6.3	ma
Load Resistance	—	—	20000	—	ohms
Second-Harmonic Distortion	—	—	5	—	per cent
Useful Power Output	—	—	135	—	mw

Maximum Circuit Values:

Grid-Circuit Resistance:		
For fixed-bias operation	0.1 max	megohm
For cathode-bias operation	0.5 max	megohm

RF AMPLIFIER AND OSCILLATOR—Class C

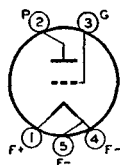
Maximum CCS Ratings, Design-Center Values:

DC PLATE VOLTAGE	180 max	volts
DC PLATE CURRENT	8 max	ma
DC GRID CURRENT	2 max	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	80 max	volts
Heater positive with respect to cathode	80 max	volts

958-A

MEDIUM-MU TRIODE

Acorn coated-filament type used as rf power amplifier and oscillator at frequencies up to 350 Mc. Class C Telegraphy maximum CCS plate dissipation (design-center value), 0.6 watt. Requires Acorn five-contact socket and may be mounted in any position. OUTLINE 2, *Outlines* Section. Plate shows no color when tube is operated at maximum CCS ratings.



VIEWED FROM SHORT END

FILAMENT VOLTAGE (DC)	1.25	volts
FILAMENT CURRENT	0.10	ampere
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	2.5	μf
Grid to filament	0.45	μf
Plate to filament	0.6	μf

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy# and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum CCS Ratings, Design-Center Values:

DC PLATE VOLTAGE	135 max	volts
DC GRID VOLTAGE	-30 max	volts
DC PLATE CURRENT	7 max	ma
DC GRID CURRENT	1 max	ma
PLATE INPUT	0.95 max	watt
PLATE DISSIPATION	0.6 max	watt

Typical Operation:

DC Plate Voltage	135	volts
DC Grid Voltage*	-20	volts
From grid resistor of	20000	ohms
From cathode resistor of	2500	ohms