

away from the lead seal. Otherwise, the heat of the soldering operation will crack the seals of the leads and damage the tube. Plate shows no color when tube is operated at maximum CCS ratings.

HEATER VOLTAGE (AC/DC)	6.3	volts
HEATER CURRENT	0.15	ampere
TRANSCONDUCTANCE*	6500	μ hos
AMPLIFICATION FACTOR*	27	
PLATE RESISTANCE (Approx.)*	4150	ohms
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	1.4	μ f
Grid to cathode and heater	2.2	μ f
Plate to cathode and heater	0.7	μ f

* Plate-supply volts, 150; cathode resistor, 180 ohms; plate milliamperes, 13.

RF AMPLIFIER AND OSCILLATOR—Class C

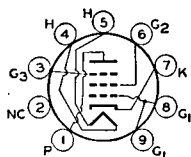
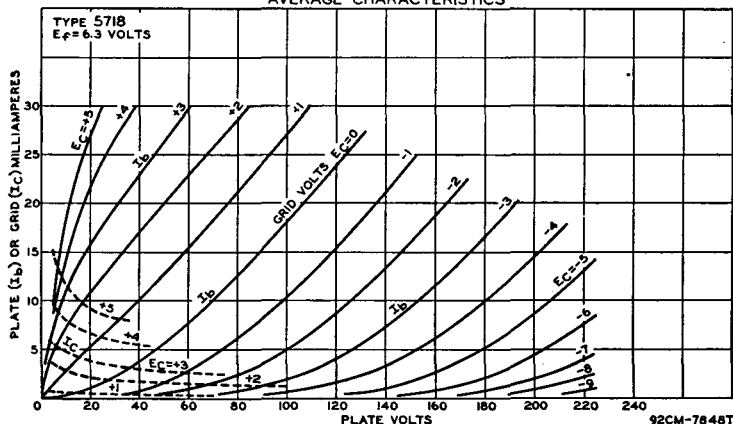
Maximum CCS Ratings:

DC PLATE VOLTAGE	165 max	volts
DC GRID VOLTAGE	-55 max	volts
DC PLATE CURRENT	22 max	ma
DC GRID CURRENT	5.5 max	ma
PLATE DISSIPATION	3.3 max	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max	volts
Heater positive with respect to cathode	200 max	volts
BULB TEMPERATURE	250 max	$^{\circ}$ C

Maximum Circuit Values:

Grid-Circuit Resistance:		
For cathode-bias operation	1.2 max	megohms
For fixed-bias operation	Not recommended	

AVERAGE CHARACTERISTICS



BEAM POWER TUBE

Nine-pin miniature heater-cathode type used as rf power amplifier and oscillator and as frequency multiplier. May be used with full input up to 50 Mc. For operation at 175

Mc, plate input should be reduced to 80 per cent of maximum rating. Class C Telephony maximum plate dissipation, CCS 12 watts, ICAS 13.5 watts. Requires

5763

RCA Transmitting Tubes

Noval nine-contact socket and may be mounted in any position. **OUTLINE 9, Outlines Section.** Plate shows no color when tube is operated at maximum CCS or ICAS ratings.

HEATER VOLTAGE (AC/DC)	6.0 $\pm$ 10%	volts
HEATER CURRENT	0.75	amperes
TRANSCONDUCTANCE*	7000	μ mhos
MU-FACTOR, Grid No.2 to Grid No.1*	16	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid No.1 to plate	0.3 max	μ f
Grid No.1 to cathode, grid No.3, grid No.2, and heater	9.5	μ f
Plate to cathode, grid No.3, grid No.2, and heater	4.5	μ f

* Plate and grid-No.2 volts, 250; grid-No.1 volts, -7.5; plate milliamperes, 45.

PLATE-MODULATED RF POWER AMPLIFIER—Class C Telephony

Carrier conditions per tube for use with a maximum modulation factor of 1.0

Maximum Ratings:	CCS	ICAS	
DC PLATE VOLTAGE	250 max	300 max	volts
DC GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE	0 max	0 max	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE	250 max	250 max	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-125 max	-125 max	volts
DC PLATE CURRENT	40 max	50 max	ma
DC GRID-No.2 CURRENT	15 max	15 max	ma
DC GRID-No.1 CURRENT	5 max	5 max	ma
PLATE INPUT	10 max	15 max	watts
GRID-No.2 INPUT	1.5 max	1.5 max	watts
PLATE DISSIPATION	8 max	12 max	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	100 max	100 max	volts
Heater positive with respect to cathode	100 max	100 max	volts
BULB TEMPERATURE (At hottest point)	250 max	250 max	°C

Typical Operation at Frequencies up to 30 Mc:

DC Plate Voltage	250	300	volts
Grid No.3	Connected to cathode at socket		
DC Grid-No.2 Voltage δ	250	250	volts
DC Grid-No.1 Voltage δ	-39	-42.5	volts
From grid-No.1 resistor of	39000	18000	ohms
Peak RF Grid-No.1 Voltage	46.5	53.5	volts
DC Plate Current	40	50	ma
DC Grid-No.2 Current	5.6	6	ma
DC Grid-No.1 Current (Approx.)	1	2.4	ma
Driving Power (Approx.)	0.05	0.15	watt
Useful Power Output (Approx.)	6.4 [■]	10 [■]	watts

Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance	0.1 max	megohm
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δ Obtained preferably from separate source modulated along with the plate supply, or from the modulated plate supply through a series resistor.

δ Obtained from grid-No.1 resistor of value shown or from a combination of grid-No.1 resistor with either fixed supply or cathode resistor.

[■] Measured at load of output circuit.

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy#

and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum Ratings:	CCS	ICAS	
DC PLATE VOLTAGE	300 max	350 max	volts
DC GRID-No.3 VOLTAGE	0 max	0 max	volts
DC GRID-No.2 VOLTAGE	250 max	250 max	volts
DC GRID-No.1 VOLTAGE	-125 max	-125 max	volts
DC PLATE CURRENT	50 max	50 max	ma
DC GRID-No.2 CURRENT	15 max	15 max	ma
DC GRID-No.1 CURRENT	5 max	5 max	ma
PLATE INPUT	15 max	17 max	watts
GRID-No.2 INPUT	2 max	2 max	watts
PLATE DISSIPATION	12 max	13.5 max	watts

RCA Transmitting Tubes

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode	100 max	100 max	volts
Heater positive with respect to cathode	100 max	100 max	volts
BULB TEMPERATURE (At hottest point)	250 max	250 max	°C

Typical Operation:

	30Mc	50Mc	30Mc	
DC Plate Voltage	300	300	350	volts
Grid No. 3	Connected to cathode at socket			
DC Grid-No.2 Voltage	250	250	250	volts
DC Grid-No.1 Voltage δ	-28.5	-60	-28.5	volts
From grid-No.1 resistor of	18000	22000	18000	ohms
Peak RF Grid-No.1 Voltage	37.5	80	37	volts
DC Plate Current	50	50	48.5	ma
DC Grid-No.2 Current	6.6	5	6.2	ma
DC Grid-No.1 Current (Approx.)	1.6	3	1.6	ma
Driving Power (Approx.)	0.1	0.35	0.1	watt
Useful Power Output (Approx.)	10.3 [■]	7 [■]	12 [■]	watts

Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance	0.1 max	megohm
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Key-down conditions per tube without amplitude modulation. Amplitude modulation essentially negative may be used provided the positive peak of the audio-frequency envelope does not exceed 115 per cent of the carrier conditions.

δ Obtained from fixed supply or from grid-No.1 resistor of value shown.

■ Measured at load of output circuit.

FREQUENCY MULTIPLIER

Maximum CCS Ratings:

DC PLATE VOLTAGE	300 max	volts
DC GRID-NO.3 VOLTAGE	0 max	volts
DC GRID-NO.2 VOLTAGE	250 max	volts
DC GRID-NO.1 VOLTAGE	-125 max	volts
DC PLATE CURRENT	50 max	ma
DC GRID-NO.2 CURRENT	15 max	ma
DC GRID-NO.1 CURRENT	5 max	ma
PLATE INPUT	15 max	watts
GRID-NO.2 INPUT	2 max	watts
PLATE DISSIPATION	12 max	watts

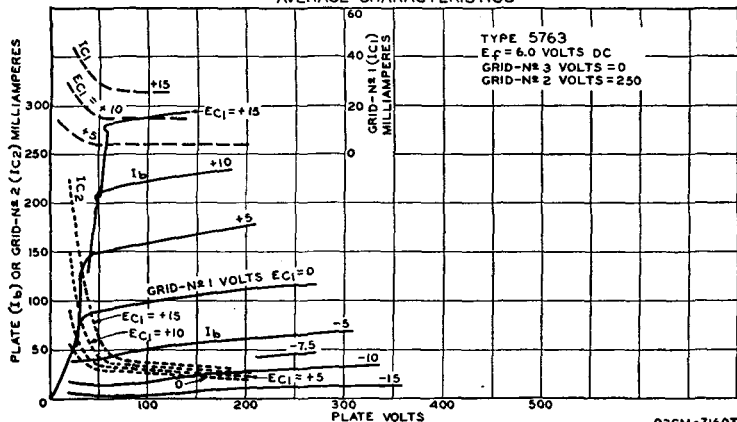
PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode	100 max	volts
Heater positive with respect to cathode	100 max	volts
BULB TEMPERATURE (At hottest point)	250 max	°C

Typical Operation at Frequencies up to 175 Mc:

	Doubler	Tripler	
DC Plate Voltage	300	300	volts
Grid No.3	Connected to cathode at socket		
DC Grid-No.2 Voltage	*	*	volts

AVERAGE CHARACTERISTICS



92CM-7160T