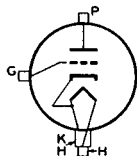


POWER TRIODE

5713

Forced-air-cooled heater-cathode type having integral radiator used in grid-drive circuits and in cathode-drive circuits up to 220 Mc. Class C Telegraphy maximum CCS plate dissipation, 250 watts. This type may be mounted in vertical position only, radiator up or down. *OUTLINE 74, Outlines Section.* A minimum air flow of 18 cubic feet per minute should be directed through the radiator toward the bulb and grid terminal when the tube is operated at maximum rated dissipation. Air flow should start before and continue during the application of any voltages to the tube. Maximum temperatures: incoming air, 45°C; radiator, measured on core at bulb end, 180°C; glass, 180°C; and grid terminal, 140°C.



HEATER VOLTAGE (AC/DC) °	3.3 ± 0.2	volts
HEATER CURRENT	11.5	amperes
AMPLIFICATION FACTOR*	25	
DIRECT INTERELECTRODE CAPACITANCES (Approx.):		
Grid to plate	10.3	μμf
Grid to cathode and heater	26	μμf
Plate to cathode and heater	0.5	μμf

° Heater voltage must be applied for a minimum time of 2 minutes before application of plate voltage.

* Plate volts, 1000; plate milliamperes, 150.

RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy# and

RF POWER AMPLIFIER—Class C FM Telephony

Maximum CCS Ratings:

DC PLATE VOLTAGE	1500 max	volts
DC GRID VOLTAGE	-250 max	volts
DC PLATE CURRENT	300 max	ma
DC GRID CURRENT	50 max	ma
PLATE INPUT	450 max	watts
PLATE DISSIPATION	250 max	watts

Typical Operation:

	Grid-Drive	Cathode-Drive at 220 Mc	
DC Plate Voltage	1500	1500	volts
DC Grid Voltage δ	-175	-175	volts
From cathode resistor of	510	510	ohms
Peak RF Grid Voltage	210	210	volts
DC Plate Current	300	300	ma
DC Grid Current (Approx.)	40	40	ma
Driving Power (Approx.)	8	65*	watts
Power Output (Approx.)	290	325	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.

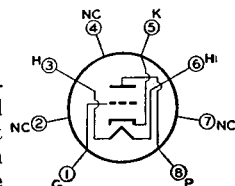
δ Obtained from fixed supply or from cathode resistor of value shown.

* Required by tube and input circuit. A portion of this power appears in the load circuit.

MEDIUM-MU TRIODE

5718

Premium subminiature heater-cathode type used as rf amplifier and oscillator. May be used with full input up to 1000 Mc. Class C maximum CCS plate dissipation, 3.3 watts. Tube



may be operated in any position. *OUTLINE 3, Outlines Section.* The flexible leads of the 5718 are usually soldered to the circuit elements. Soldering of the leads may be made close to the glass stem provided care is taken to conduct excessive heat

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.

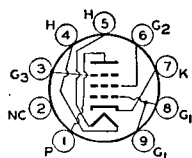
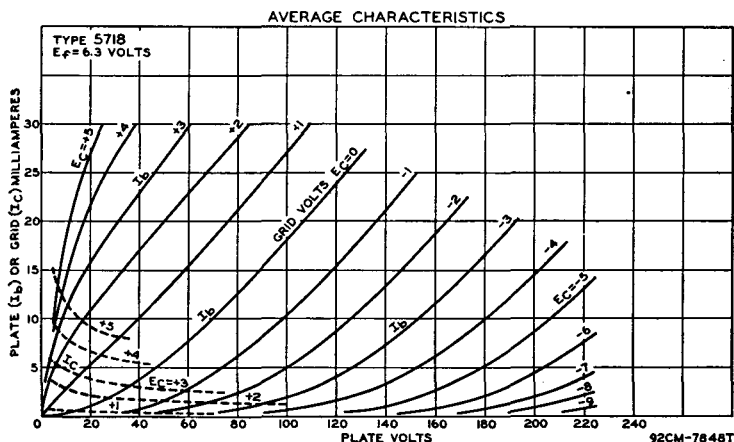
RF AMPLIFIER AND OSCILLATOR—Class C

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	



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