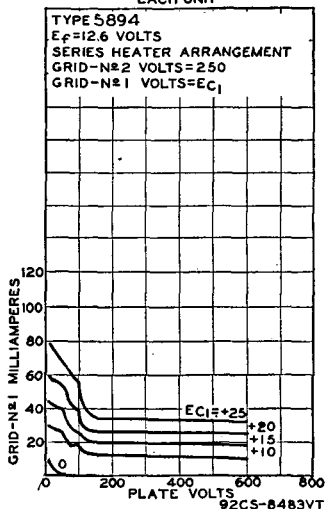
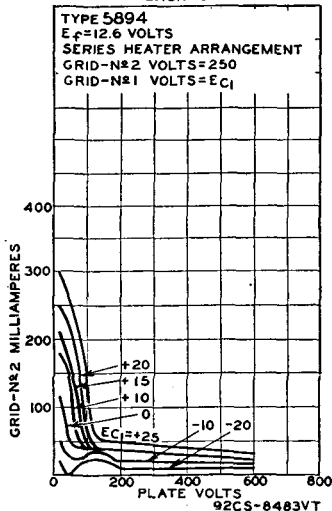


**AVERAGE CHARACTERISTICS
EACH UNIT**



**AVERAGE CHARACTERISTICS
EACH UNIT**

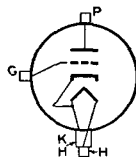


POWER TRIODE

5946

Forced-air-cooled heater-cathode type used as plate-pulsed oscillator and amplifier. May be used with full input up to 1300 Mc. For operation at 2000 Mc, plate voltage and plate input

should be reduced to 75 per cent of maximum ratings. Class C maximum plate dissipation, 250 watts. Tube may be mounted in any position. OUTLINE 71, *Outlines* Section. A minimum air flow of 16 cubic feet per minute should be directed through the radiator toward the bulb and grid terminal when the 5946 is operated at maximum rated dissipation. Air flow should start before and continue during application of any voltages to the tube. Heater power, plate power, and air may be removed simultaneously. Maximum temperatures: radiator (measured on core at end adjacent to plate ring), 180°C; grid terminal, 150°C; plate, grid, and cathode seals, 150°C.



HEATER VOLTAGE (AC/DC)°	6.3 ± 10%	volts
HEATER CURRENT	3.4	amperes
AMPLIFICATION FACTOR*	27	
DIRECT INTERELECTRODE CAPACITANCES:		
Grid to plate	6	μf
Grid to cathode and heater	11	μf
Plate to cathode and heater□	0.22	μf

° Heater voltage must be applied for a minimum period of 1 minute before the application of plate voltage.

* Grid volts, -15; plate milliamperes, 250.

□ With external shield connected to grid.

PLATE-PULSED OSCILLATOR AND AMPLIFIER—Class C

Maximum Ratings:

For an "on" time° of	10 max	100 max	μsec
PEAK POSITIVE-PULSE PLATE-SUPPLY VOLTAGE♦	7500 max	7500 max	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	600 max	600 max	volts
PEAK PLATE CURRENT FROM PULSE SUPPLY	4.5 max	3.5 max	amperes
PEAK RECTIFIED GRID CURRENT	1.0 max	0.75 max	amperes
DC PLATE CURRENT	45 max	250 max	ma
DC GRID CURRENT	10 max	70 max	ma
PLATE INPUT	340 max	340 max	watts
PLATE DISSIPATION	250 max	250 max	watts

Typical Operation with Rectangular Wave Shape in Cathode-Drive Oscillator Circuit at 1250 Mc.

With duty factor[■] of 0.01

Peak Positive-Pulse Plate-Supply Voltage [†]	5500	7500	volts
Peak Negative-Pulse Grid Voltage	375	500	volts
From cathode resistor of ^Δ	100	100	ohms
Peak RF Grid Voltage	625	850	volts
Peak Plate Current from Pulse Supply	3.5	4.5	amperes
Peak Rectified Grid Current	0.25	0.50	amperes
DC Plate Current	35	45	ma
DC Grid Current	2.5	5	ma
Useful Power Output at Peak of Pulse [‡] (Approx.)	8000	14000	watts

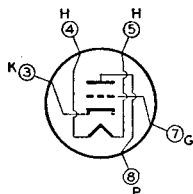
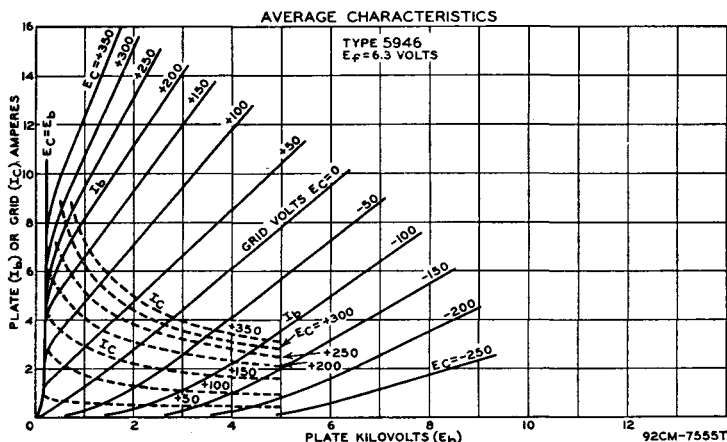
* "On" time for this tube is defined as the sum of the durations of all the individual pulses which occur during any 1000-microsecond interval. Pulse duration is defined as the time interval between the two points on the pulse at which the instantaneous value is 70 per cent of the peak value. The peak value is defined as the maximum value of a smooth curve through the average of the fluctuations over the top portion of the pulse.

† The magnitude of any spike on the plate-voltage pulse should not exceed a value of 8.5 kilovolts with respect to cathode, and its duration should not exceed 0.5 microsecond measured at the peak-pulse-value level.

■ Duty factor is the product of pulse duration and repetition rate. For variable pulse durations and pulse repetition rates, the duty factor for this tube is defined as the ratio of "on" to total elapsed time in any 500-microsecond interval.

Δ Obtained preferably from cathode resistor of value shown. In certain applications, partial grid-resistor bias may be used.

‡ Determined from the average power output using the duty factor of the peak power output pulse. This procedure is necessary because the power-output-pulse duty factor may be less than the applied-voltage-pulse duty factor because of a delay in the start of rf power output.



OSCILLATOR TRIODE

Subminiature heater-cathode type used in radiosonde service at 400 Mc. Class C Telegraphy maximum CCS plate dissipation, 3 watts. May be mounted in any position. **OUTLINE**

6026

4, Outlines Section. The flexible leads of the 6026 are usually soldered to the circuit elements. Soldering of the leads may be made close to the glass-button base 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 RANGE (AC/DC)°	5.2 to 6.6	volts
HEATER CURRENT (At 6.3 volts)	0.2	ampere
TRANSCONDUCTANCE*	5900	μ mhos