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884, 885 THYRATRONS

TRIODE TYPES

For new equipment design, RCA-884 is recommended.

GENERAL DATA

Electrical:

Type 884

Type 885

Heater Coated Unipotential Cathode

Voltage $6.3 \pm 10\%$ $2.5 \pm 10\%$ a-c ord-c volts

Current 0.6 1.5 amp.

Direct Interelectrode

Capacitances:

Grid to Anode . . . 6 6 μf Grid to Cathode . . 2 2 μf Anode to Cathode . . 0.6 0.6 μf

Tube Voltage Drop . . 16 16 . . approx. volts

Physical:

Mounting Position . . Any

Maximum Overall Length 4-1/8 4-3/16 inches

Maximum Seated Length 3-9/16 3-9/16 inches

Maximum Diameter . . 1-9/16 1-9/16 inches

Bulb ST-12 ST-12

Base { Small Shell { Small
Octal 6-Pin 5-PinBasing Designation G-6Q₂ 5A₂

Pin 1—No Connection

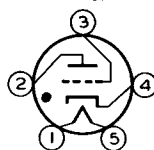
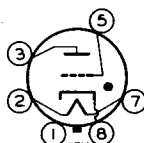
Pin 2—Heater

Pin 3—Anode

Pin 5—Grid

Pin 7—Heater

Pin 8—Cathode



Pin 1—Heater

Pin 2—Anode

Pin 3—Grid

Pin 4—Cathode

Pin 5—Heater

BOTTOM VIEWS

RELAXATION OSCILLATOR — Sweep-Circuit Service^Δ

Maximum Ratings, Absolute Values:

PEAK ANODE VOLTAGE 300 max. volts

PEAK CATHODE CURRENT 300 max. ma.

PEAK GRID CURRENT[▲] 1 max. ma.

PEAK VOLTAGE BETWEEN ANY TWO ELECTRODES

OR BETWEEN ANY ELECTRODE AND HEATER . . 350 max. volts

D-C HEATER-CATHODE POTENTIAL -100 to +25 volts

AMBIENT TEMPERATURE RANGE -75 to +90 °C

^Δ For best life results, it is desirable to delay tube conduction for about 10 seconds after applying heater voltage in order to allow the cathode to reach normal operating temperature.

● In sweep circuits designed so that the peak cathode current of 300 milliamperes will not be exceeded during condenser discharge, the resultant average cathode current is so small in comparison with the average-current capability of the cathode that a maximum rating for average cathode current is omitted because it has no practical significance.

[▲] The resistance of the grid resistor should be not less than 1000 ohms per maximum instantaneous volt applied to the grid. Resistance values in excess of 500000 ohms may cause circuit instability.

← Indicates a change.

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THYRATRONS

(continued from preceding page)

RELAY & GRID-CONTROLLED RECTIFIER SERVICE [□] At Frequencies Below 75 Cycles per Second

Maximum Ratings, Absolute Values:

	PEAK ANODE VOLTAGE.	350 max.	volts
	PEAK CATHODE CURRENT.	300 max.	ma.
	AVERAGE CATHODE CURRENT [#]	75 max.	ma.
	PEAK VOLTAGE BETWEEN ANY TWO ELECTRODES OR BETWEEN ANY ELECTRODE AND HEATER . .	350 max.	volts
→	D-C HEATER-CATHODE POTENTIAL.	-100 to +25	volts
→	AMBIENT TEMPERATURE RANGE	-75 to +90	°C

[□] The heater voltage should be applied for 10 seconds before tube con-
duction occurs.

[#] For an averaging period of 30 seconds.

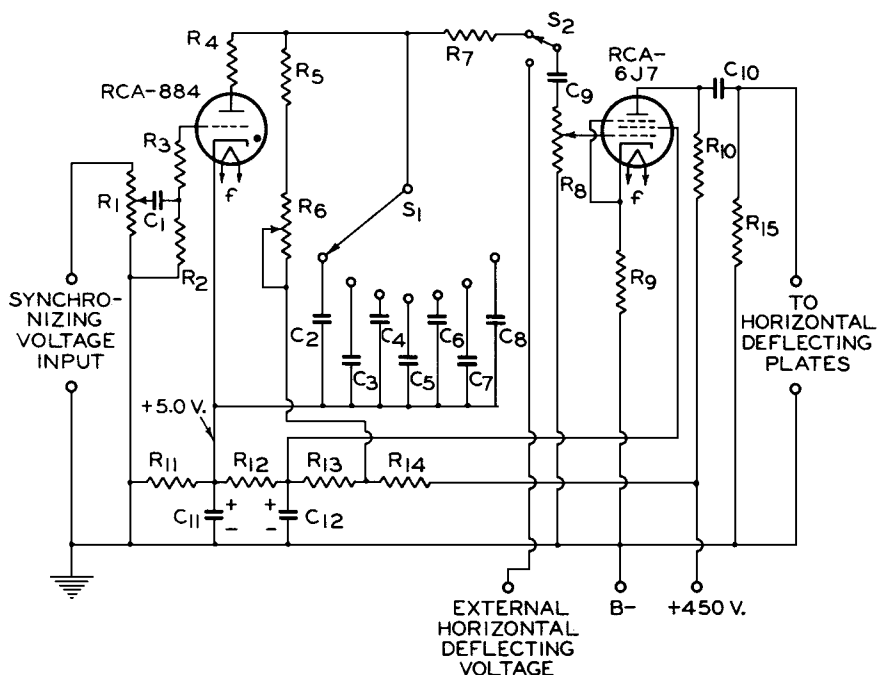
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LINEAR SWEEP-CIRCUIT OSCILLATOR AND AMPLIFIER



$C_1 = 0.25 \mu\text{f}$ OR GREATER

$C_2 = 0.25 \mu\text{f}$, 500 V.

$C_3 = 0.1 \mu\text{f}$, 500 V.

$C_4 = 0.04 \mu\text{f}$, 500 V.

$C_5 = 0.015 \mu\text{f}$, 500 V.

$C_6 = 0.005 \mu\text{f}$, 500 V.

$C_7 = 0.002 \mu\text{f}$, 500 V.

$C_8 = 0.0008 \mu\text{f}$, 500 V.

$C_9 = 0.5 \mu\text{f}$, 250 V.

$C_{10} = 0.5 \mu\text{f}$, 500 V.

$C_{11} = 25 \mu\text{f}$, 15 V.

$C_{12} = 8 \mu\text{f}$, 200 V.

$R_1 = 5000 \text{ OHM (MAX.) POTENTIOMETER}$

$R_2 = \text{NOT GREATER THAN } 50000 \text{ OHMS}$

$R_3 = 2000-3000 \text{ OHMS, } 0.5 \text{ WATT}$

$R_4 = 350-500 \text{ OHMS, } 0.5 \text{ WATT}$

$R_5 = 0.3-0.5 \text{ MEGOHM, } 0.5 \text{ WATT}$

$R_6 = 1 \text{ MEGOHM POTENTIOMETER}$

$R_7 = 1 \text{ MEGOHM, } 0.5 \text{ WATT}$

$R_8 = 0.5 \text{ MEGOHM POTENTIOMETER}$

$R_9 = 850 \text{ OHMS, } 0.5 \text{ WATT}$

$R_{10} = 0.1 \text{ MEGOHM, } 0.5 \text{ WATT}$

$R_{11} = 1500 \text{ OHMS, } 0.5 \text{ WATT}$

$R_{12} = 25000 \text{ OHMS, } 1.0 \text{ WATT}$

$R_{13} = 60000 \text{ OHMS, } 1.0 \text{ WATT}$

$R_{14} = 60000 \text{ OHMS, } 1.0 \text{ WATT}$

$R_{15} = 2.0 \text{ MEGOHMS, } 1.0 \text{ WATT}$

$S_1 = 7\text{-CONTACT S.P. SWITCH}$

$S_2 = \text{S.P.D.T. SWITCH}$

92CM-4875R1

APPROXIMATE FREQUENCY RANGE (CYCLES/SEC.)

SWITCH (S_1) ON		C_2	C_3	C_4	C_5	C_6	C_7	C_8
R_6 AT	MAX.	20	40	110	280	670	1500	3600
	MIN.	60	130	340	880	2200	4900	11400

The license extended to the purchaser of tubes appears in the License Notice accompanying them. Information contained herein is furnished without assuming any obligations.

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DEC. 15, 1944

RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

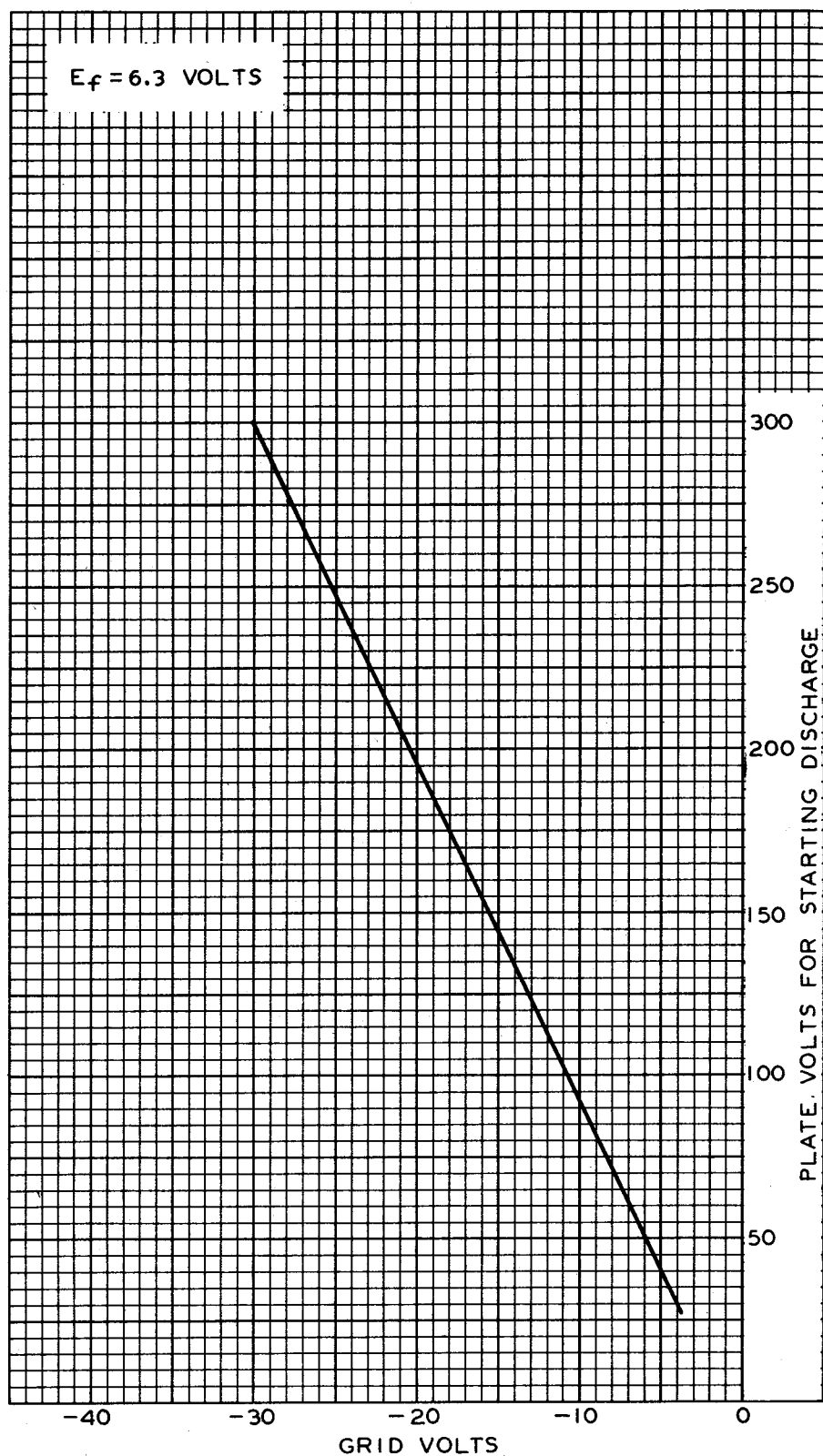
DATA 2

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AVERAGE CONTROL CHARACTERISTIC



JAN. 4, 1945

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