



955

955

DETECTOR, AMPLIFIER, OSCILLATOR

ACORN TYPE

Especially for wavelengths between 0.5 meter and 5 meters

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.15	amp.
Direct Interelectrode Capacitances:		
Grid to Plate	1.4	μf
Grid to Cathode	1.0	μf
Plate to Cathode	0.6	μf
Overall Length		1-7/32" $\pm$ 5/32"
Overall Diameter		1-3/32" $\pm$ 1/16"
Bulb	See Outline in GENERAL SECTION	T-4 $\frac{1}{2}$
Base		Small Radial 5-Pin
Pin 1-Heater		Pin 4-Heater
Pin 2-Plate		Pin 5-Cathode
Pin 3-Grid		
RCA Socket		Stock No. 9925
Mounting Position		Any



Short Part of Bulb: Bottom
BOTTOM VIEW (5BC)

Maximum Ratings Are Design-Center Values

A-F AMPLIFIER

D-C Plate Voltage	250 max.	volts
Plate Dissipation	1.6 max.	watts
D-C Heater-Cathode Potential	80 max.	volts

Typical Operation and Characteristics—Class A₁ Amplifier:

D-C Plate Voltage	90	135	180	250	volts
D-C Grid Voltage*	-2.5	-3.75	-5	-7	volts
Amplification Factor	25	25	25	25	
Plate Resistance	14700	13200	12500	11400	ohms
Transconductance	1700	1900	2000	2200	μmhos
D-C Plate Current	2.5	3.5	4.5	6.3	ma.
Load Resistance	-	-	20000	-	ohms
Second Harmonic Dist.	-	-	5	-	%
Power Output	-	-	135	-	mw

Typical Operation with Resistance-Coupling:

Plate-Supply Voltage ⁰	180	volts
D-C Grid Voltage*	-3.5	volts
Load Resistance	250000	ohms
Plate Current	0.42	ma.
Second Harmonic Distortion	5	%
Voltage Output	45 RMS	volts
Voltage Gain	20 approx.	

R-F POWER AMPLIFIER & OSCILLATOR—Class C

Plate Modulated or C.W.

D-C Plate Voltage	180 max.	volts
D-C Plate Current	8 max.	ma.
D-C Grid Current	2 max.	ma.
D-C Heater-Cathode Potential	80 max.	volts

Typical Operation:

D-C Plate Voltage	180	volts
D-C Grid Voltage	-35 approx.	volts
D-C Plate Current	7	ma.

•, *, ⁰: See next page.

Indicates a change.

JUNE 30, 1944

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

DATA



DETECTOR, AMPLIFIER, OSCILLATOR

(continued from preceding page)

D-C Grid Current

1.5 approx.ma.

Power Output**

0.5 approx.watt

DETECTOR

Typical Operation:

Plate-Supply Voltage^o

Biased

180

Grid-Leak

45 volts

Grid Voltage

-7 approx.

Grid Return to Cathode volts

Load Resistance

0.25

- megohm

Plate Current

Adjusted to 0.2 ma. approx.
with no input signal.

- ma.

Cathode Resistor

50000 approx.

- ohms

Grid Leak

-

1 to 5 megohms

Grid Condenser

-

0.00025 μ f

• With no external shield.

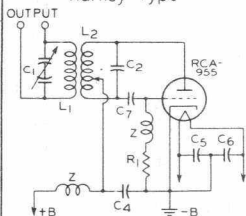
* Under maximum rated conditions, the resistance in the grid circuit should not exceed 0.1 megohm with fixed bias, or 0.5 megohm with cathode bias.

^o This is a plate-supply voltage value. The voltage effective at plate will be plate-supply voltage minus the voltage drop in load caused by plate current.

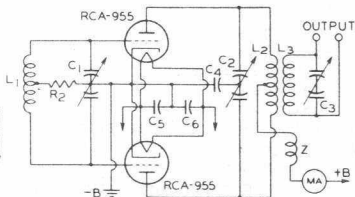
** At 5 meters, only moderate reduction in this value will be found for wavelengths as low as 1 meter. Below 1 meter, the power output decreases as the wavelength is decreased.

R-F grounding by means of condensers placed close to the tube pins is required if the full capabilities of the 955 for ultra-high-frequency uses are to be obtained.

U-H-F OSCILLATOR
Hartley Type



PUSH-PULL U-H-F OSCILLATOR
Tuned-Plate Tuned-Grid Type



$L_1, C_1, L_2, C_2, L_3, C_3$ = DEPEND ON
FREQUENCY RANGE DESIRED

C_4, C_5, C_6 = 100 μ f

C_7 = 50 μ f

R_1 = 20000 TO 25000 OHMS, 1/2 WATT

R_2 = 10000 TO 12500 OHMS, 1/2 WATT

Z = R-F CHOKE

92CM-6558

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

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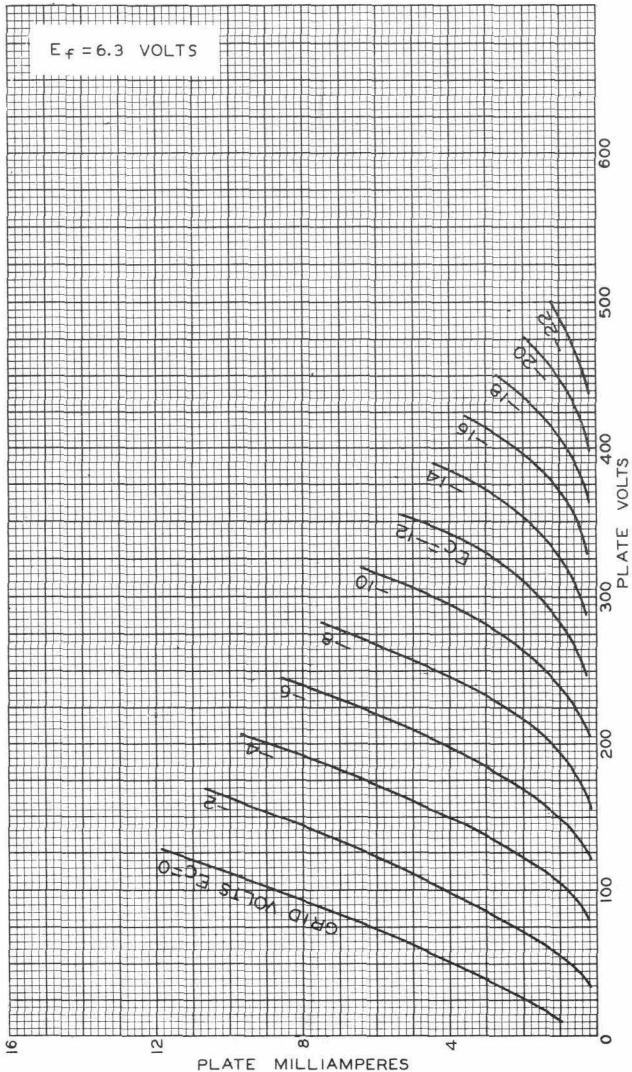
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AVERAGE PLATE CHARACTERISTICS



MAY 7, 1941

RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

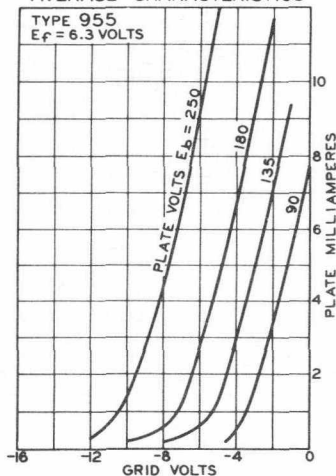
92C-556IRI



CHARACTERISTICS CURVES

AVERAGE CHARACTERISTICS

TYPE 955
 $E_f = 6.3$ VOLTS

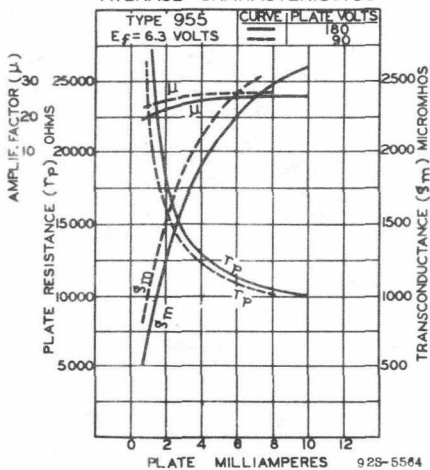


92C-5563R1

AVERAGE CHARACTERISTICS

TYPE 955
 $E_f = 6.3$ VOLTS

CURVE PLATE VOLTS
 180
 90



92S-5564