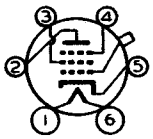
TRIPLE-GRID DETECTOR AMPLIFIER

Heater ■	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.3	amp.
Direct Interelectrode Capacitances:		
Grid to Plate	0.007 max.°	μμf
Input	4.7	μμf
Output	11	μμf
Overall Length		4-9/32" to 4-17/32"
Seated Height		3-21/32" to 3-29/32" ←
Maximum Diameter		1-9/16"
Bulb		ST-12
Cap		Small Metal
Base		Small 6-Pin
Pin 1 - Heater		Pin 5 - Cathode
Pin 2 - Plate		Pin 6 - Heater
Pin 3 - Screen		Cap - Grid
Pin 4 - Suppressor		
Mounting Position	BOTTOM VIEW (6F)	Any



AMPLIFIER

Plate Voltage	300 max.	volts
Screen Voltage	100 max.	volts
Screen Supply Voltage	300 max.	volts
Grid Voltage	0 min.	volts
Plate Dissipation	0.75 max.	watt
Screen Dissipation	0.1 max.	watt

Typical Operation and Characteristics - Class A_1 Amplifier:

Plate	100	250	volts
Screen	60	100	volts
Grid *	-1.5	-3	volts
Suppressor	Connected to cathode at socket		
Plate Res. (approx.)	0.6	#	megohm
Transcond.	1100	1250	μmhos
Grid Bias for cathode-current cut-off	-5.5	-7.5	volts
Plate Cur.	1.7	2.3	ma.
Screen Cur.	0.4	0.5	ma.

DETECTOR

Typical Operation as Biased Detector:

Plate Supply ▲	100	250	250	volts
Screen	36	50	100 max.	volts
Grid	-1.95	-1.95	-4.3	volts
Cathode Resistor	12500	3000	10000	ohms
Suppressor	Connected to cathode at socket			
Cathode Cur. (no signal)	0.155	0.650	0.43	ma.
Plate Resistor	0.25	0.25	0.5	megohm
Blocking Condenser	0.01	0.03	0.03	μf
Grid Resistor for following amplifier tube	0.25	0.25	0.25	megohm
R-F Signal (RMS) oo	1.88	1.18	1.37	volts

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

° With shield-can connected to cathode. The internal shield within the dome of the 77 is connected to the screen within the tube.

* The d-c resistance in the grid circuit should not exceed 1.0 megohm.

▲ Voltage at plate will be Plate-Supply voltage minus voltage drop in plate resistor caused by plate current.

oo With these signal values modulated 20%, the voltage output for the 100-volt plate supply is 14 peak volts at the grid of the following amplifier; likewise, for the 250-volt conditions, 17 peak volts.

\# Greater than 1.0 megohm. ← Indicates a change.

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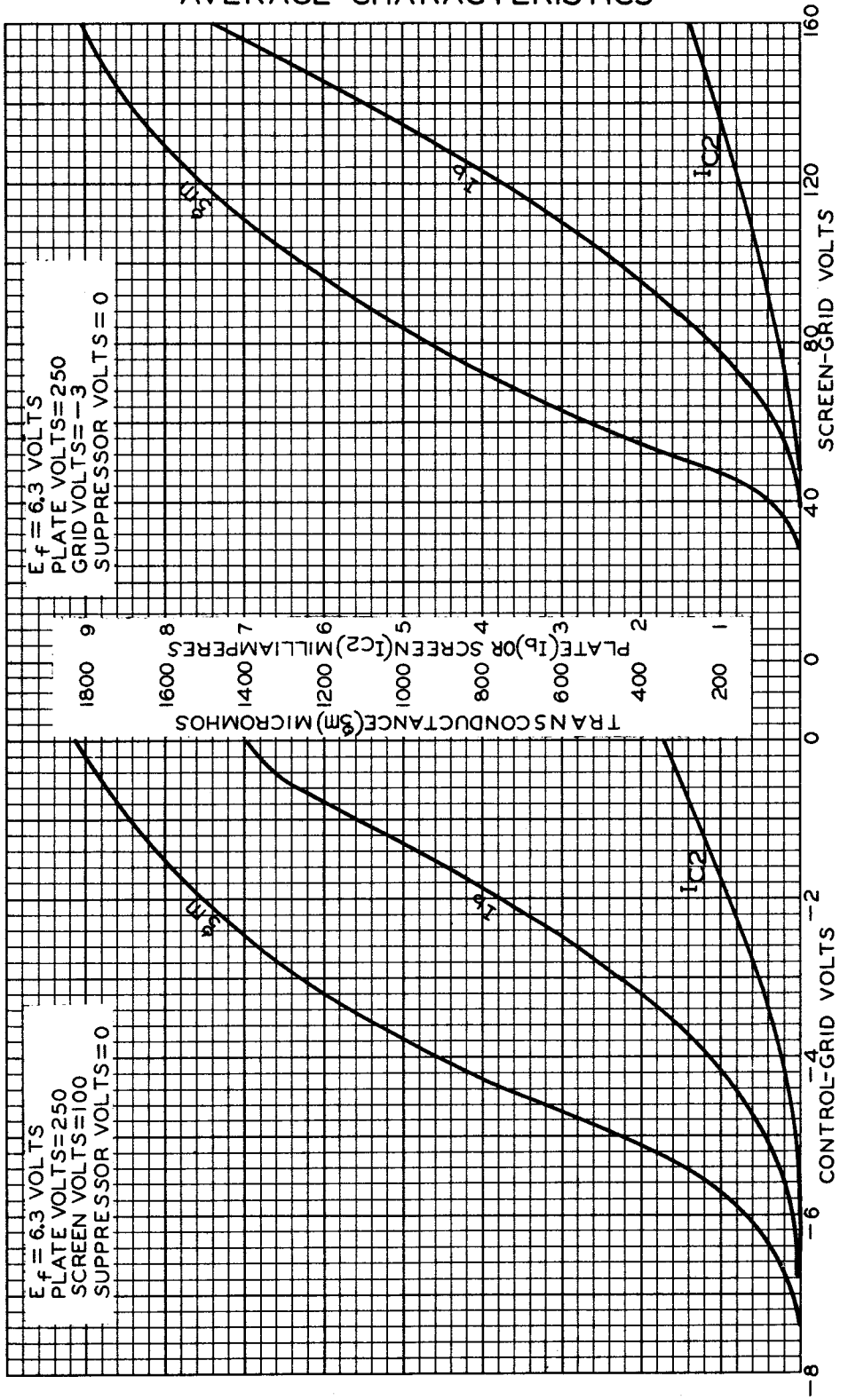
AVERAGE CHARACTERISTICS



RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

RCA Cunningham Radiotron RADIO TUBES

RCA-77

AVERAGE PLATE CHARACTERISTICS

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RCA Cunningham Radiotron RADIO TUBES

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AVERAGE CHARACTERISTICS