6Y6-G

BEAM POWER AMPLIFIER

GENERAL DATA

Electrical:

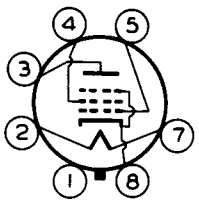
Heater, for Unipotential Cathode:		
Voltage	6.3	ac or dc volts
Current	1.25	amp
Direct Interelectrode Capacitances (Approx.):[o]		
Grid No.1 to Plate	0.7	μμf
Input	15	μμf
Output	11	μμf

[o] With no external shield.

Mechanical:

Mounting Position	Any
Maximum Overall Length	4-5/8"
Seated Length	3-7/8" + 3/16" - 5/16" ←
Maximum Diameter	1-13/16"
Bulb	ST-14
Base	Medium-Shell Octal 7-Pin
Basing Designation for BOTTOM VIEW	G-7AC

Pin 1 - No Connection
Pin 2 - Heater
Pin 3 - Plate
Pin 4 - Grid No.2



Pin 5 - Grid No.1
Pin 7 - Heater
Pin 8 - Cathode, Grid No.3

AF POWER AMPLIFIER - Class A_1

Maximum Ratings, *Design-Center Values*:

PLATE VOLTAGE	200 max.	volts
GRID-No.2 (SCREEN) VOLTAGE	135 max.	volts
PLATE DISSIPATION	12.5 max.	watts
GRID-No.2 DISSIPATION	1.75 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	180 max.	volts
Heater positive with respect to cathode	180 max.	volts

Typical Operation and Characteristics:

Plate Voltage	135	200	volts
Grid-No.2 Voltage	135	135	volts
Grid-No.1 (Control-Grid) Voltage	-13.5	-14	volts
Peak AF Grid-No.1 Voltage	13.5	14	volts
Zero-Signal Plate Current	58	61	ma
Max.-Signal Plate Current	60	66	ma
Zero-Signal Grid-No.2 Current	3.5	2.2	ma
Max.-Signal Grid-No.2 Current	11.5	9.0	ma
Plate Resistance (Approx.)	9300	18300	ohms
Transconductance	7000	7100	μmhos
Load Resistance	2000	2600	ohms

←Indicates a change.

6Y6-G
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Total Harmonic Distortion	10	10	%
Max.-Signal Power Output	3.6	6.0	watts

Maximum Circuit Values (for maximum rated conditions):

Grid-No.1-Circuit Resistance:

For fixed bias	0.1	megohm
For cathode bias	0.5	megohm

OSCILLATOR – Class C

For Television High-Voltage RF Supplies

Maximum Ratings, *Design-Center Values*:

DC PLATE VOLTAGE	350 max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE	135 max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-90 max.	volts
DC PLATE CURRENT	80 max.	ma
DC GRID-No.1 CURRENT	1.5 max.	ma
PLATE INPUT	23 max.	watts
GRID-No.2 INPUT	0.6 max.	watt
PLATE DISSIPATION	8 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	180 max.	volts
Heater positive with respect to cathode	180 max.	volts

Typical Operation:

DC Plate Voltage	350	volts
DC Grid-No.2 Voltage□□	115	volts
	5000	ohms
DC Grid-No.1 Voltage†	-40	volts
	30000	ohms
	600	ohms
Peak RF Grid-No.1 Voltage	48	volts
DC Plate Current	60	ma
DC Grid-No.2 Current	5.1	ma
DC Grid-No.1 Current (Approx.)	1.4	ma
Driving Power (Approx.)	0.1	watt
Power Output (Approx.)	14	watts

□□ Obtained from a separate source, from the plate-voltage supply with a potentiometer, or through a series resistor of value shown.

† Obtained from a fixed supply, by grid resistor (30000), by cathode resistor (600) or by combination methods.

RCA

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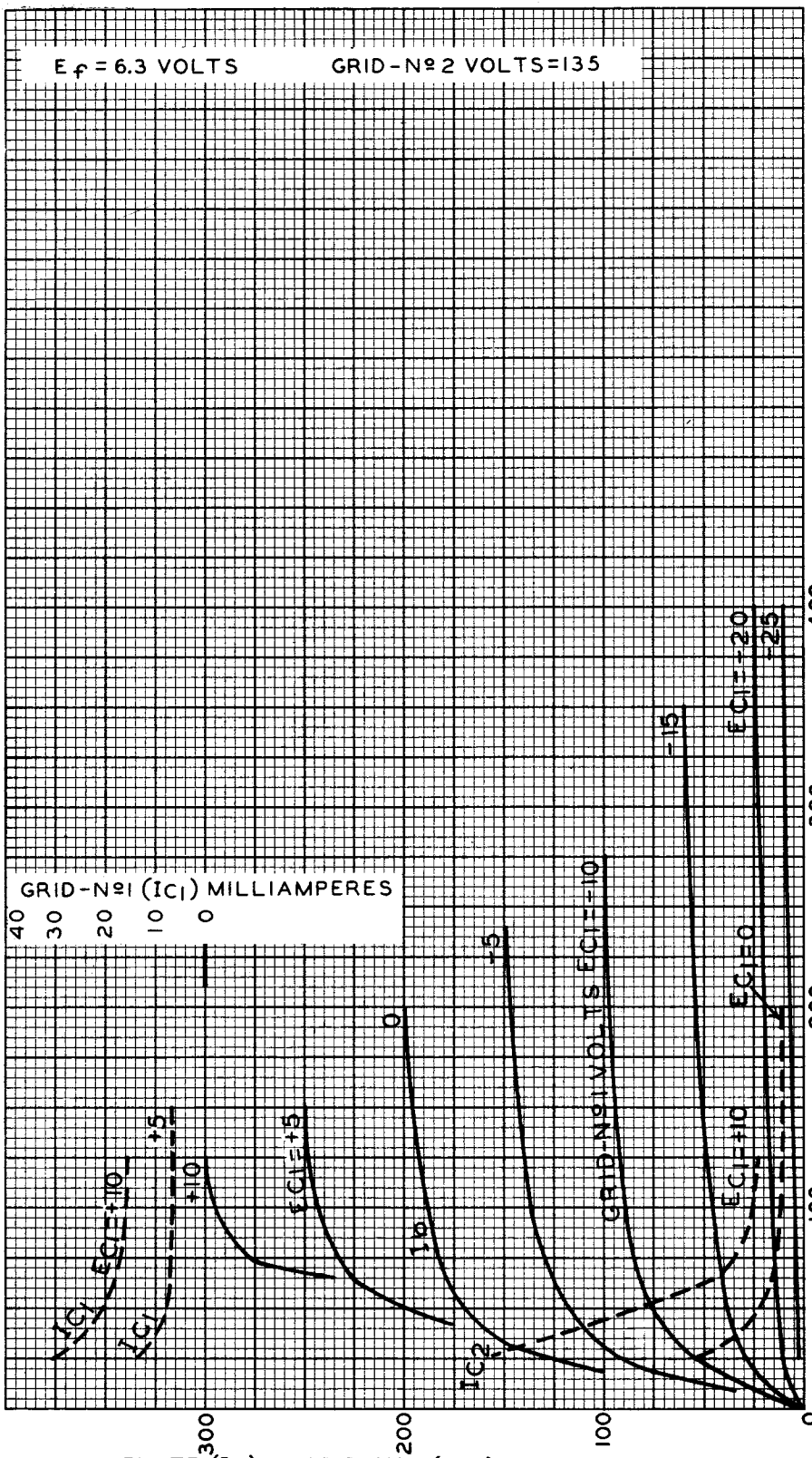
AVERAGE PLATE CHARACTERISTICS



6Y6-G

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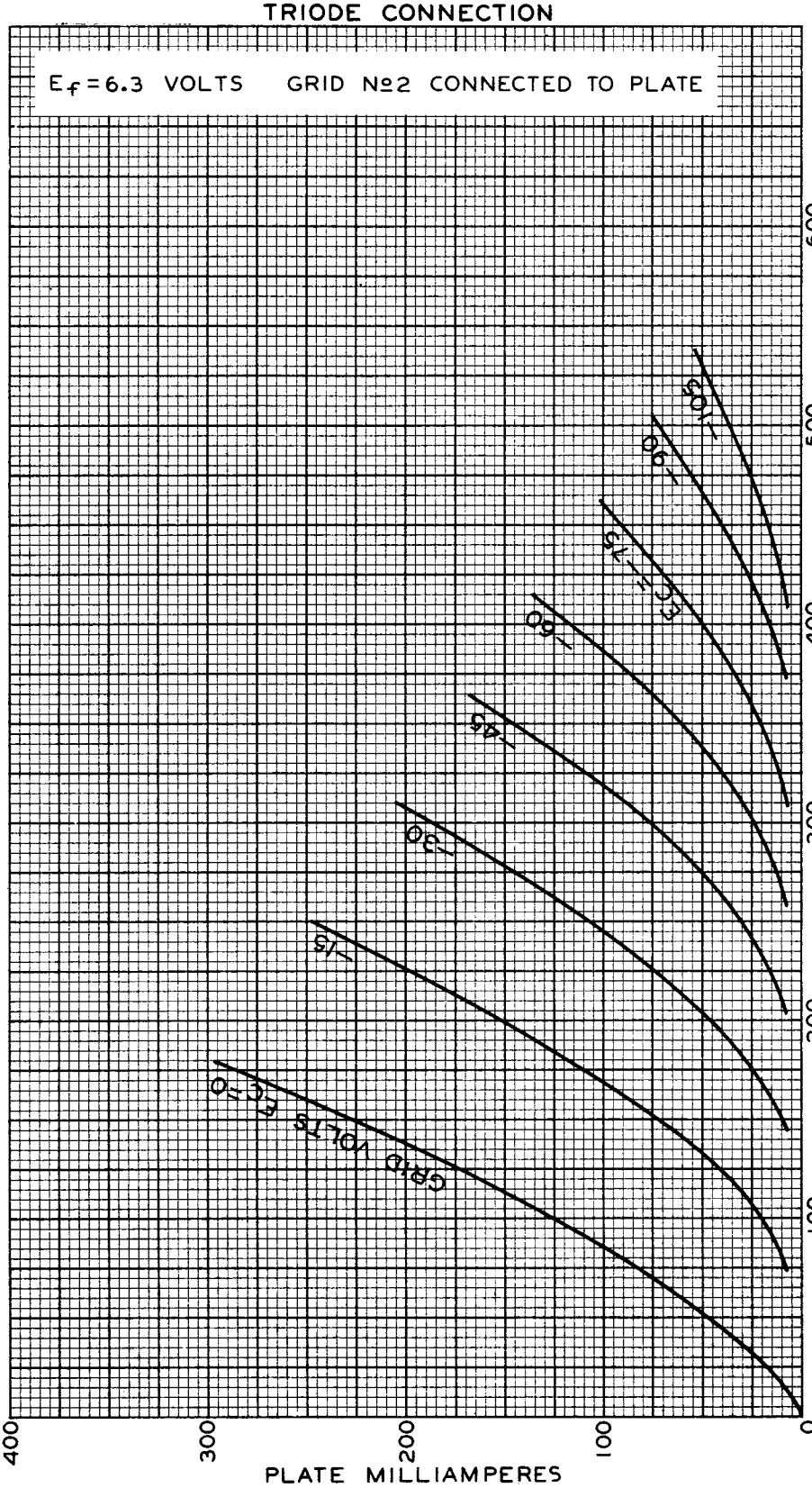
AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION



FEB. 8, 1944

TUBE DEPARTMENT

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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