

Sharp-Cutoff Pentode

With Two Independent Control Grids

7-PIN MINIATURE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC) 6.3^a 6.3±0.6 volts

Current 0.450±0.030 0.450^b amp

Warm-up time (Average) 11 - sec

Peak heater-cathode voltage:

Heater negative with
respect to cathode. 200 max. volts

Heater positive with
respect to cathode. 200^c max. volts

Direct Interelectrode Capacitances

(Approx):^d

Grid No.1 to plate. 0.023 pf

Grid No.1 to cathode & internal
shield, grid No.3, grid No.2
& internal shield, and heater 8.2 pf

Grid No.1 to grid No.3. 0.09 pf

Grid No.3 to plate. 1.6 pf

Grid No.3 to cathode & internal
shield, plate, grid No.2 &
internal shield, grid No.1,
and heater. 7.2 pf

Characteristics, Class A₁ Amplifier:

Plate Supply Voltage. 150 volts

Grid-No.3 Supply Voltage. 0 volts

Grid-No.2 Supply Voltage. 100 volts

Grid-No.1 Supply Voltage. 0 volts

Cathode Resistor. 180 ohms

Plate Resistance (Approx.) 0.11 megohm

Transconductance, Grid No.1 to Plate. 3400 μ mhos

Transconductance, Grid No.3 to Plate. 600 μ mhos

Plate Current 3.2 ma

Grid-No.2 Current 3.2 ma

Grid-No.1 Supply Voltage (Approx.)

for plate μ a = 20 -4.5 volts

Grid-No.3 Supply Voltage (Approx.)

for plate μ a = 20 -7 volts

Mechanical:

Operating Position. Any

Type of Cathode Coated Unipotential

Maximum Overall Length. 2-1/8"

Maximum Seated Length 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip) 1-1/2" ± 3/32"

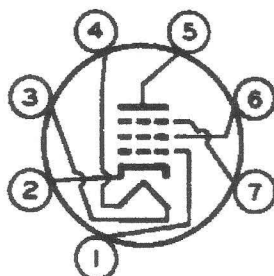
Diameter. 0.650" to 0.750"



6HZ6

Bulb. T5-1/2
 Base. Small-Button Miniature 7-Pin (JEDEC No.E7-1)
 Basing Designation For BOTTOM VIEW. 7EN

Pin 1 - Grid No.1
 Pin 2 - Cathode,
 Internal
 Shield
 Pin 3 - Heater



Pin 4 - Heater
 Pin 5 - Plate
 Pin 6 - Grid No.2,
 Internal
 Shield
 Pin 7 - Grid No.3

FM SOUND-DETECTOR SERVICE

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 300 max. volts
 GRID-No.3 (CONTROL-GRID) VOLTAGE:
 Negative value (DC and peak). 100 max. volts
 Positive value (DC and peak). 25 max. volts
 GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . 300 max. volts
 GRID-No.2 VOLTAGE See *Grid-No.2 Input Rating Chart*
 at front of Receiving Tube Section
 GRID-No.1 (CONTROL-GRID) VOLTAGE:
 Negative-bias value 50 max. volts
 Positive-bias value 0 max. volts
 GRID-No.3 INPUT 0.1 max. watt
 GRID-No.2 INPUT:
 For grid-No.2 voltages
 up to 150 volts 1 max. watt
 For grid-No.2 voltages between
 150 volts and 300 volts . See *Grid-No.2 Input Rating Chart*
 at front of Receiving Tube Section
 PLATE DISSIPATION 1.7 max. watts

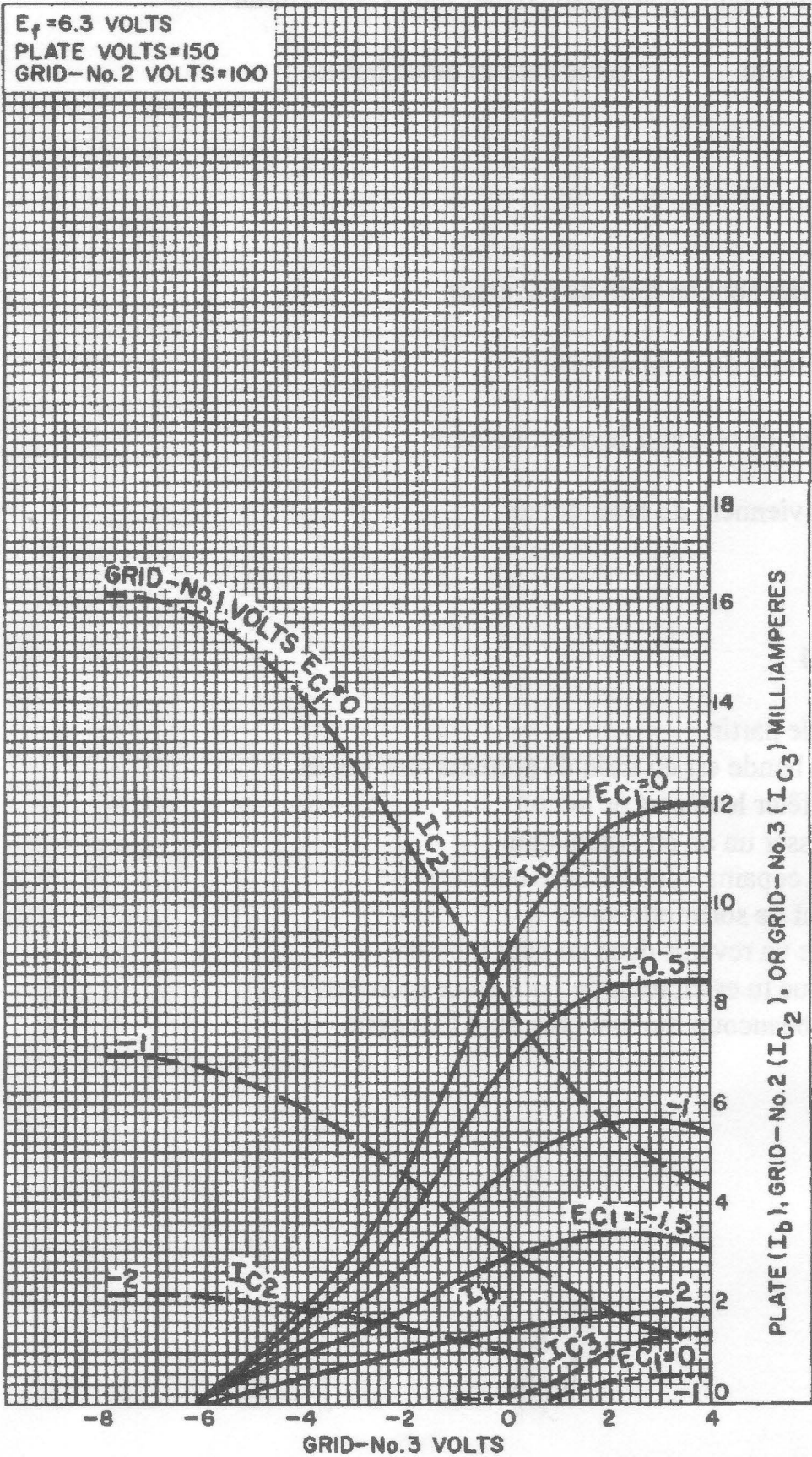
Maximum Circuit Values:

Grid-No.3-Circuit Resistance. 0.68 max. megohm
 Grid-No.1-Circuit Resistance:
 For fixed-bias operation. 0.22 max. megohm
 For cathode-bias operation. 0.47 max. megohm

- ^a At heater amperes = 0.450.
- ^b At heater volts = 6.3.
- ^c The dc component must not exceed 100 volts.
- ^d Without external shield.



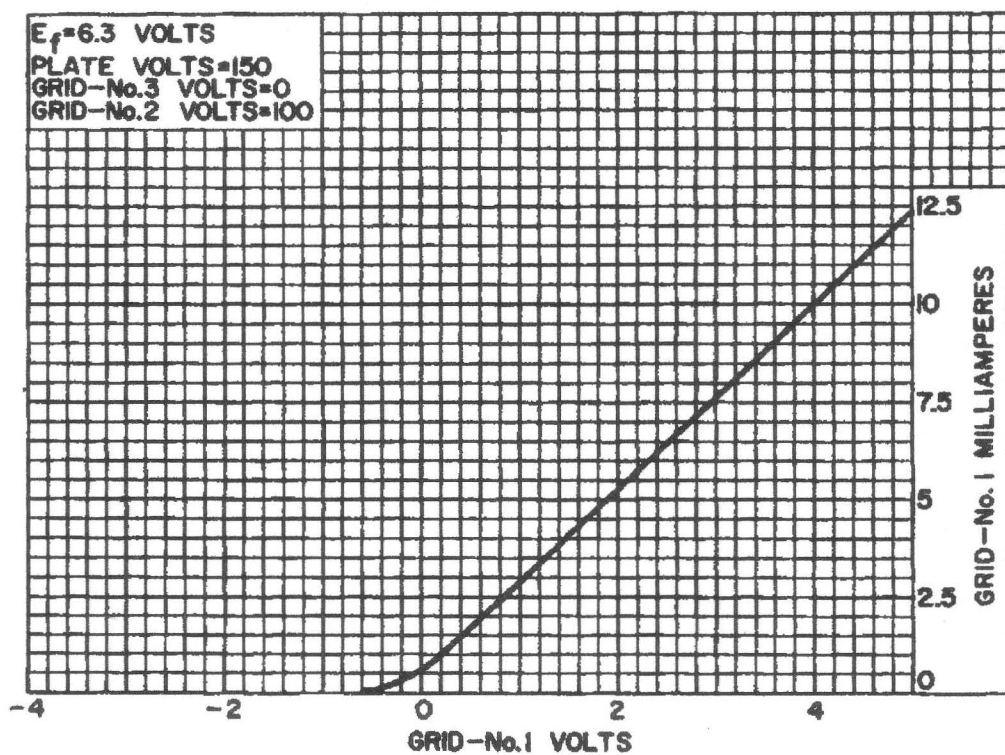
AVERAGE CHARACTERISTICS



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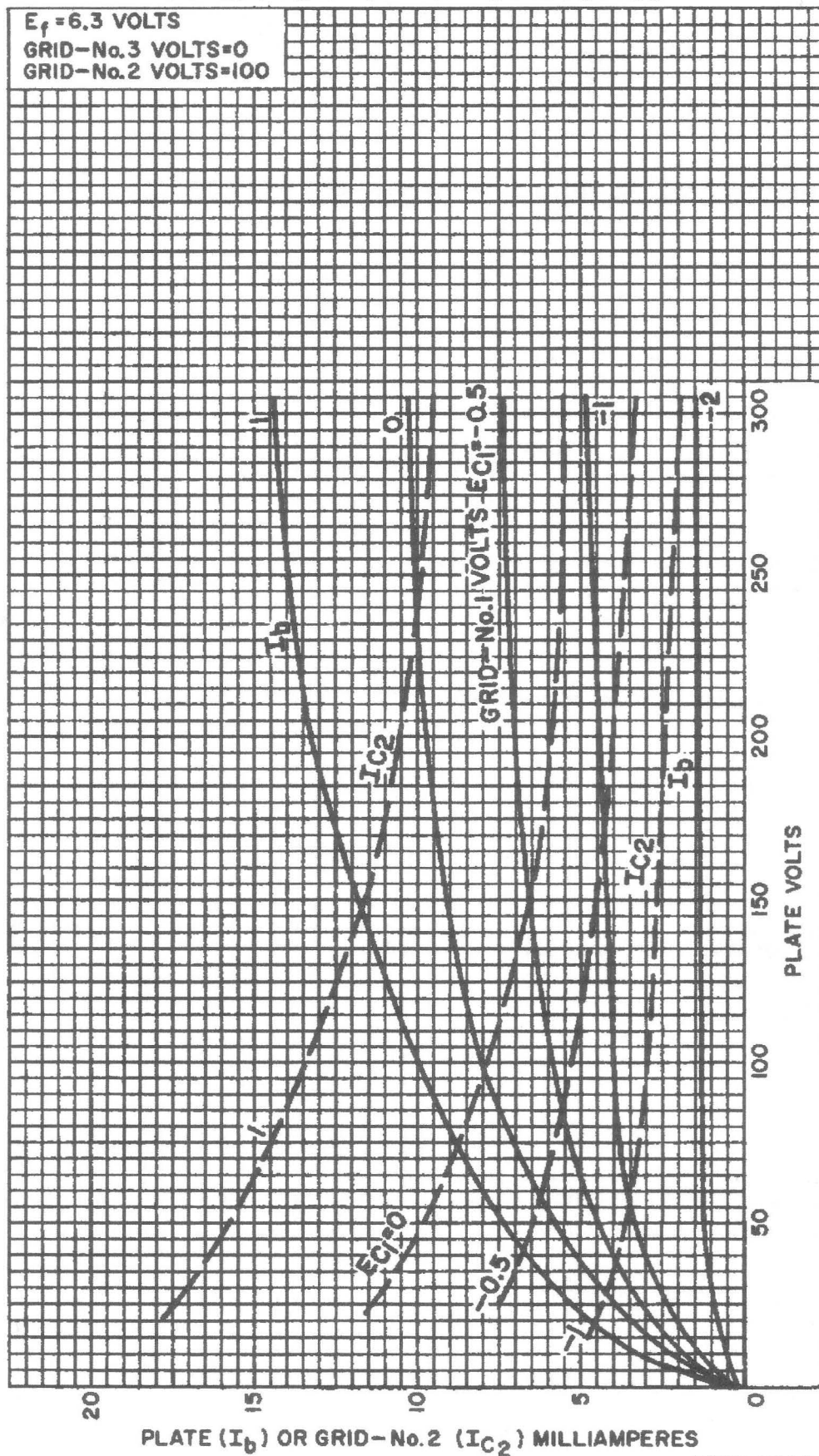


AVERAGE GRID-No.1 CHARACTERISTIC



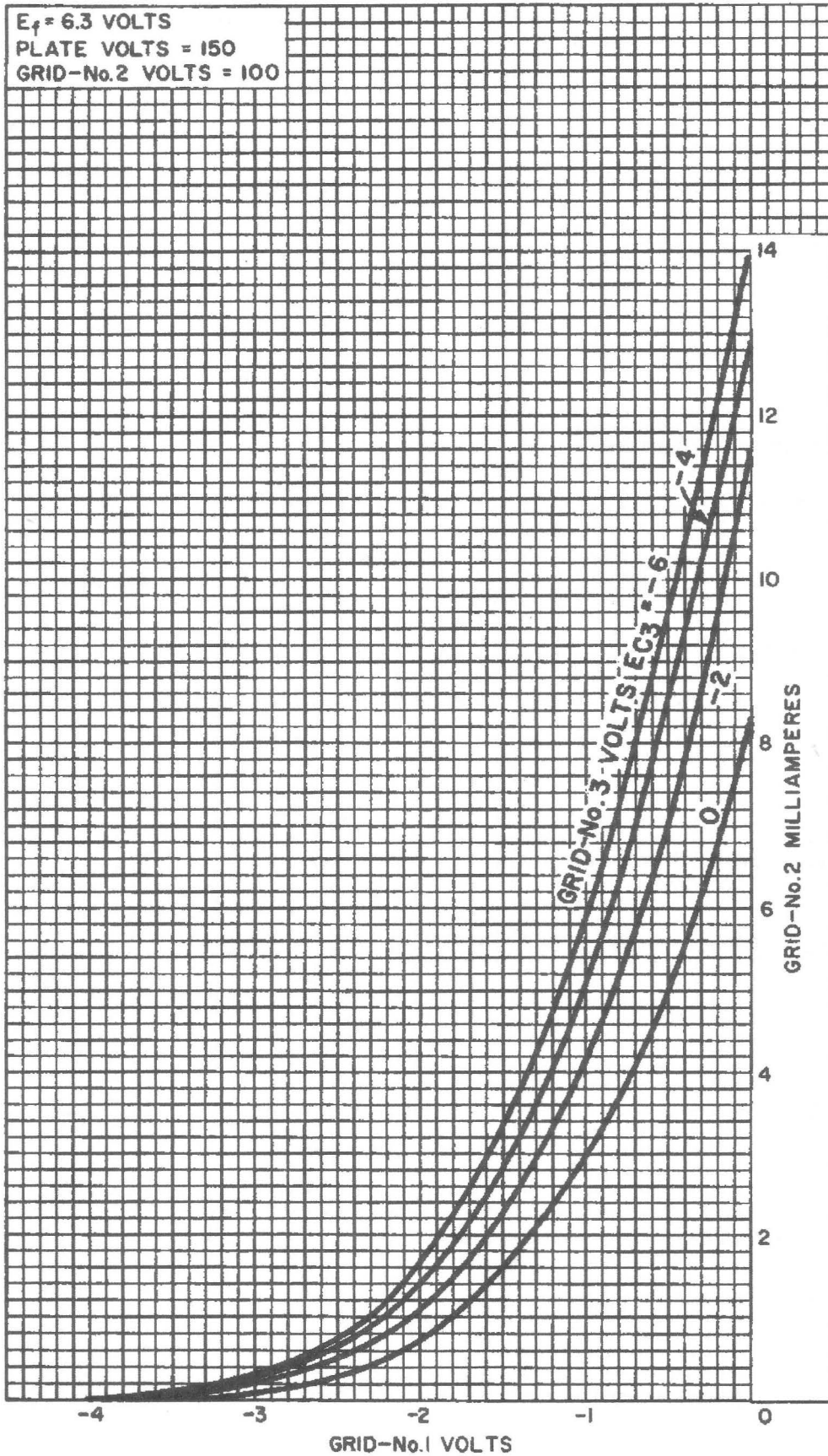
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AVERAGE CHARACTERISTICS



92CM-11792

AVERAGE CHARACTERISTICS



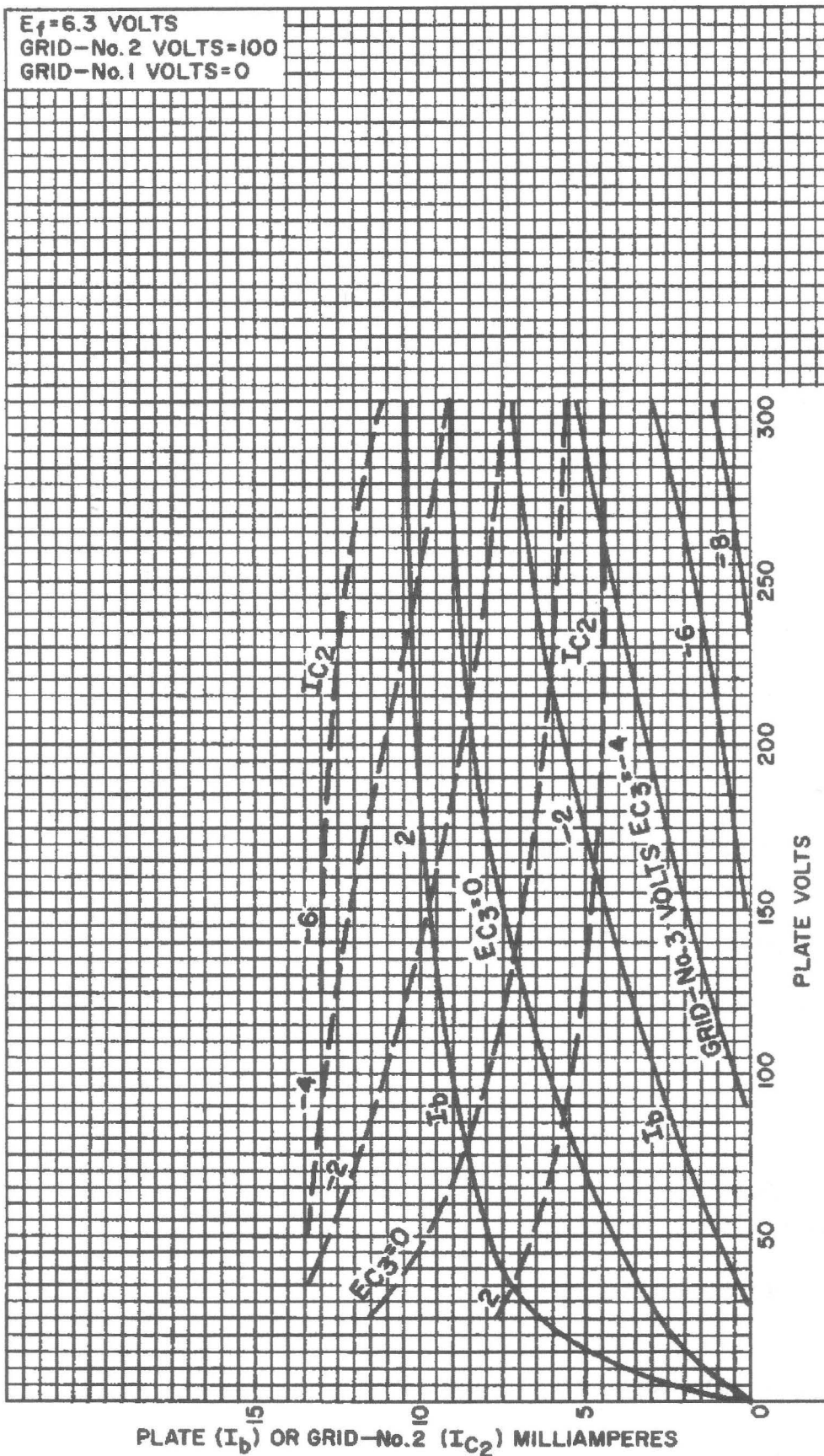
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RADIO CORPORATION OF AMERICA
 Electron Tube Division
 Harrison, N. J.

DATA 4
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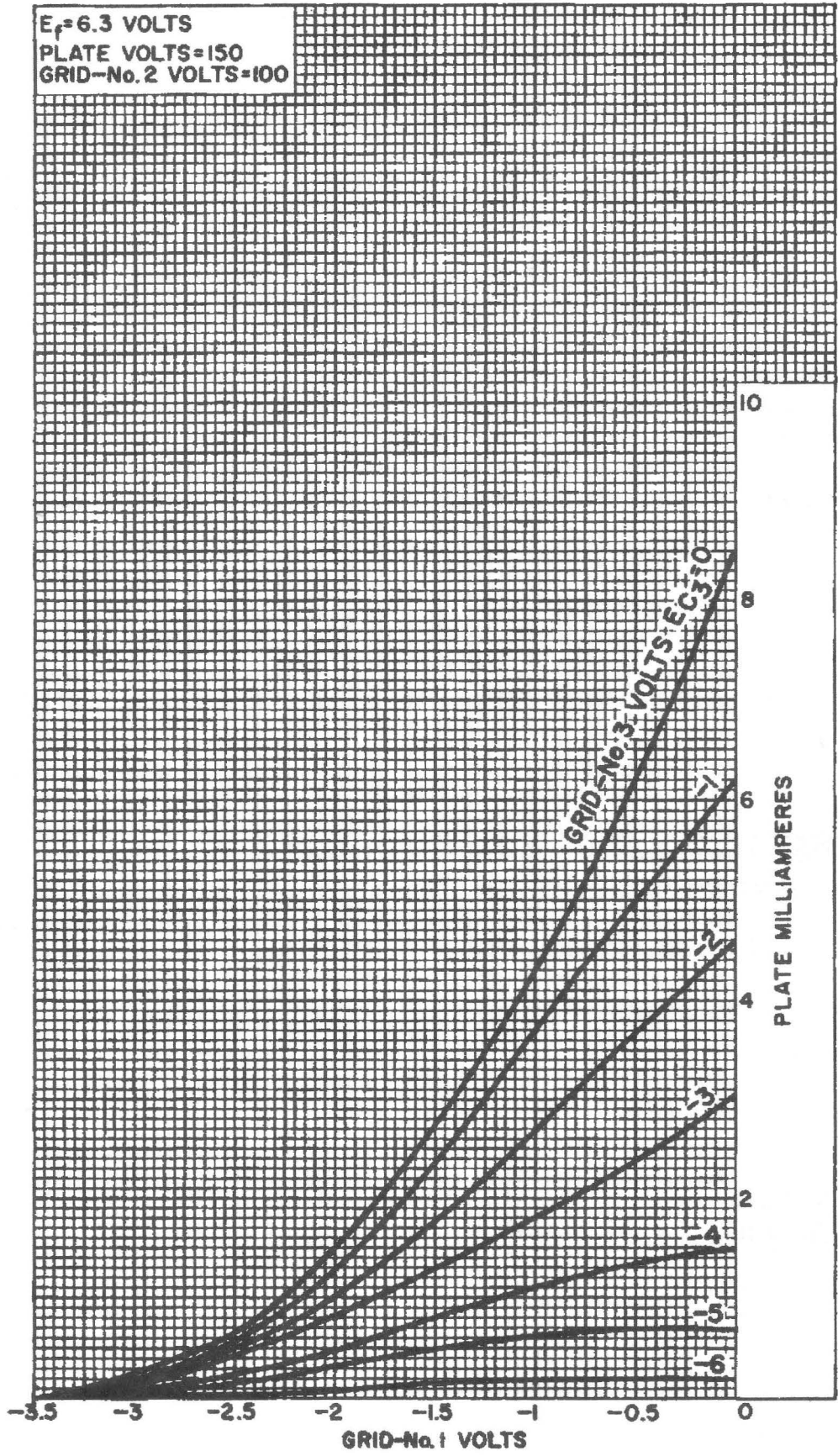
AVERAGE CHARACTERISTICS



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AVERAGE CHARACTERISTICS



92CM-11788

