



50B5

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BEAM POWER AMPLIFIER

MINIATURE TYPE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathode:

Voltage.	50	ac or dc volts
Current.	0.15	amp.

Direct Interelectrode Capacitances (Approx.):^o

Grid-No.1 to Plate . . .	0.5	μμf
Input.	13	μμf
Output	6.5	μμf

Mechanical:

Mounting Position. Any

Maximum Overall Length 2-5/8"

Maximum Seated Length. 2-3/8"

Length from Base Seat

to Bulb Top (excluding tip). 2" ± 3/32"

Maximum Diameter 3/4"

Bulb T-5-1/2

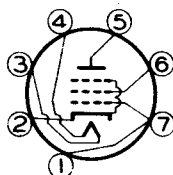
Base Miniature Button 7-Pin

Basing Designation for BOTTOM VIEW 7BZ

Pin 1-Grid No.1

Pin 2-Cathode,
Grid No.3

Pin 3-Heater



Pin 4-Heater

Pin 5-Plate

Pin 6-Grid No.2

Pin 7-Grid No.1

CLASS A₁ AMPLIFIER**Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE.	117 max.	volts
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GRID-No.2 (SCREEN) VOLTAGE	117 max.	volts
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PLATE DISSIPATION.	5.5 max.	watts
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GRID-No.2 DISSIPATION.	1.25 max.	watts
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PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	90 max.	volts
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Heater positive with respect to cathode.	90 max.	volts
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Typical Operation and Characteristics:

Plate Voltage.	110	volts
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Grid-No.2 Voltage.	110	volts
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Grid-No.1 Voltage.	-7.5	volts
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Peak A-F Grid-No.1 Voltage	7.5	volts
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Zero-Signal Plate Current.	49	ma.
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Max.-Signal Plate Current.	50	ma.
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^oWith no external shield.

JAN. 2, 1946

RCA VICTOR DIVISION

TENTATIVE DATA

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BEAM POWER AMPLIFIER

Zero-Signal Grid-No.2 Current (Approx.)	4	ma.
Max.-Signal Grid-No.2 Current (Approx.)	8.5	ma.
Plate Resistance (Approx.)	14000	ohms
Transconductance	7500	μ mhos
Load Resistance	2500	ohms
Total Harmonic Distortion	9	%
Max.-Sig. Power Output	1.9	watts

Maximum Circuit Values (for maximum rated conditions):

Grid-No.1-Circuit Res.	fixed bias	0.1	megohm
	cathode bias	0.5	megohm

JAN. 2, 1946

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TENTATIVE DATA

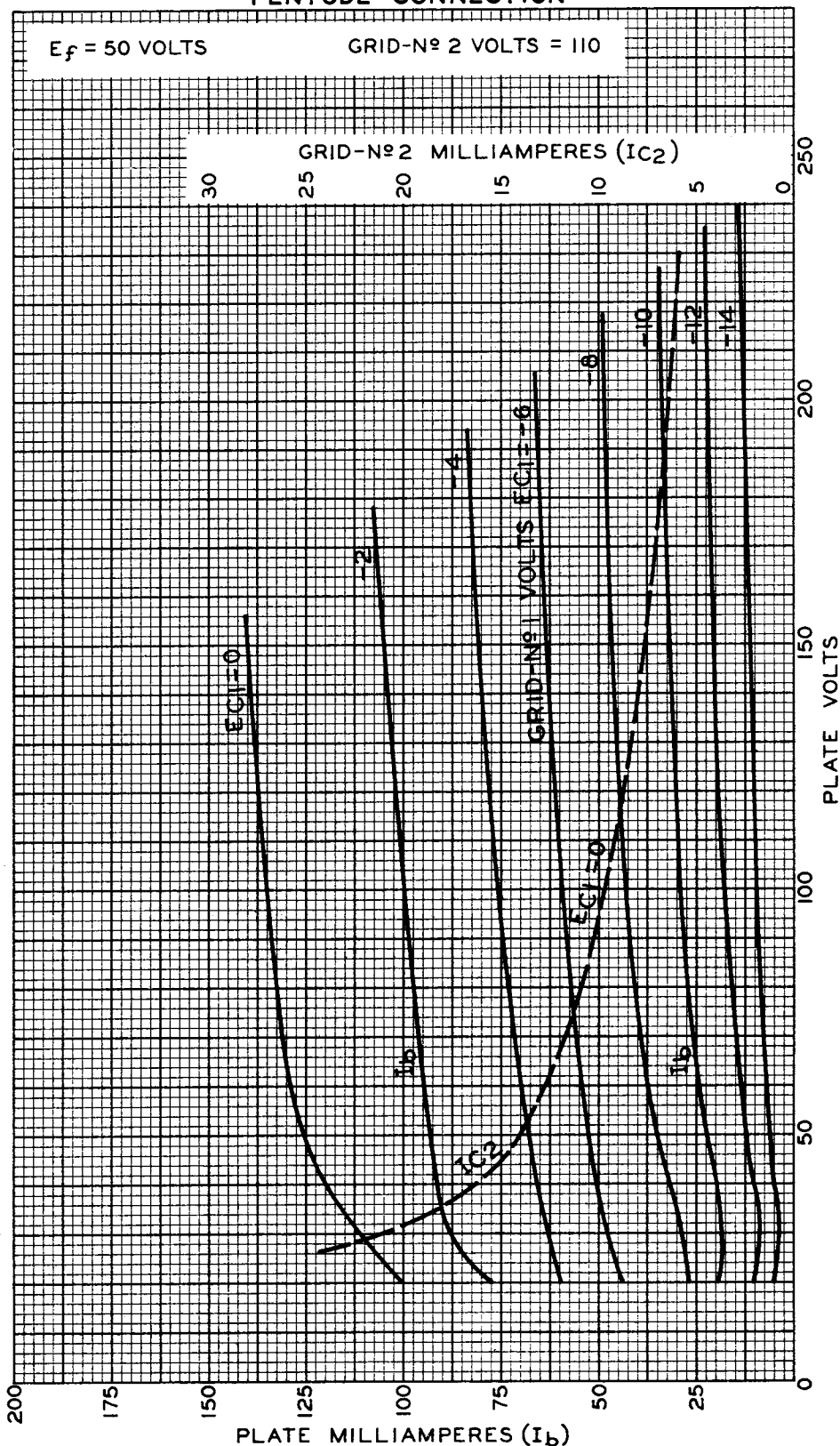
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AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



OCT. 8, 1945

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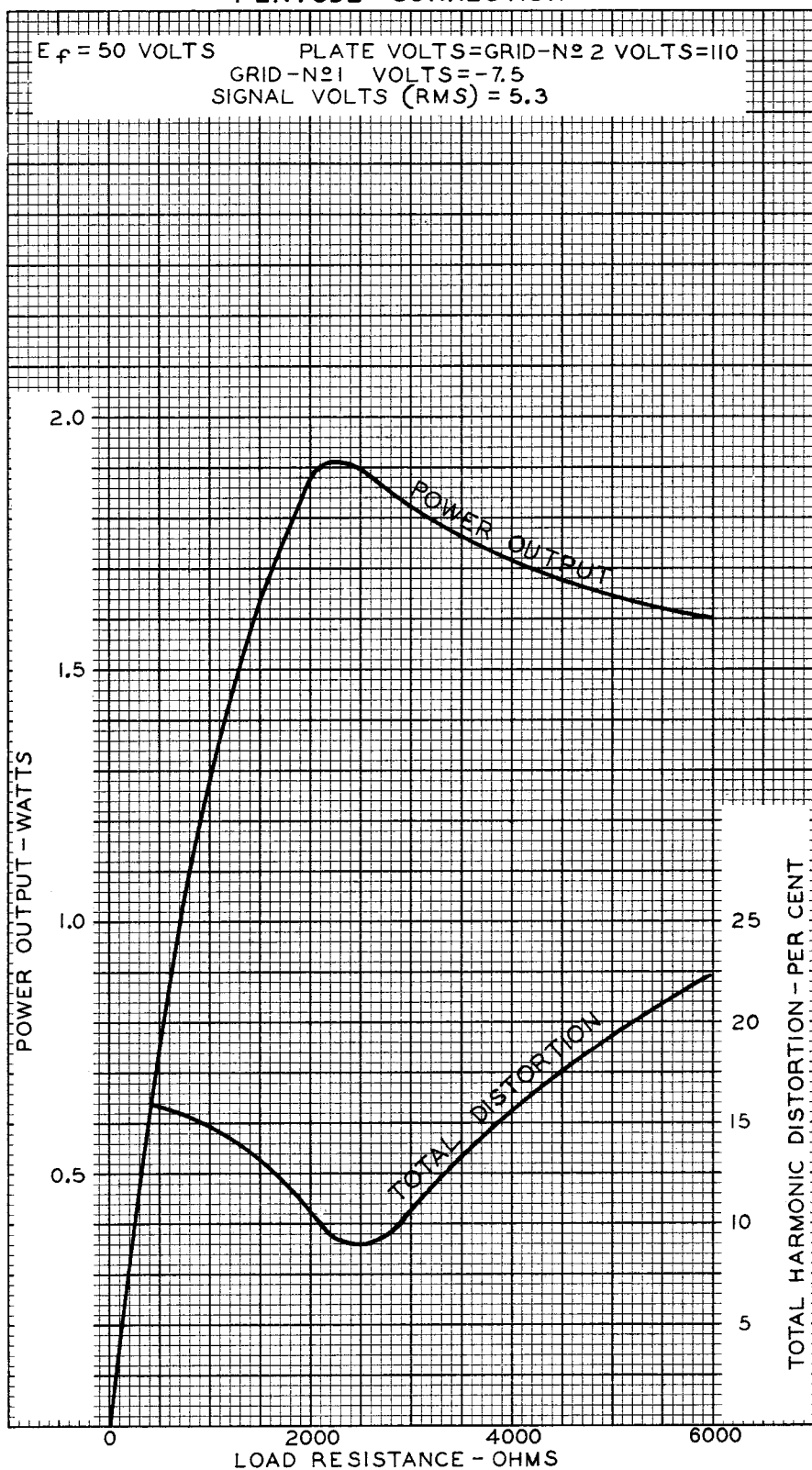
92CM-6603

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OPERATION CHARACTERISTICS
PENTODE CONNECTION

OCT. 24, 1945

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92CM-6612