6V6, 6V6-GT
BEAM POWER AMPLIFIER

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

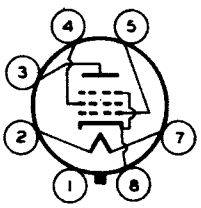
Voltage	6.3	ac or dc volts
Current	0.45	amp

Direct Interelectrode Capacitances (Approx.):

	6V6°	*6V6-GT°°*	
Grid No.1 to Plate	0.3	0.7	μμf
Input	10	9	μμf ←
Output	11	7.5	μμf

Mechanical:	*6V6*	*6V6-GT*
Mounting Position	Any	Any
Maximum Overall Length	3-1/4"	3-5/16"
Maximum Seated Length	2-11/16"	2-3/4"
Maximum Diameter	1-5/16"	1-9/32" ←
Bulb	Metal Shell, MT-8	T-9
Base	Small-Wafer Octal 7-Pin (JETEC No.B7-22)	Intermed.-Shell Octal 7-Pin (JETEC No.B7-7)
Basing Designation	7AC	G-7AC

Pin 1 – 6V6, Shell; 6V6-GT, No Connection
Pin 2 – Heater
Pin 3 – Plate



BOTTOM VIEW

Pin 4 – Grid No.2
Pin 5 – Grid No.1
Pin 7 – Heater
Pin 8 – Cathode, Grid No.3

AF POWER AMPLIFIER—Class A1

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	315 max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE	315 max.	volts
GRID-No.2 VOLTAGE	285 max.	volts
PLATE DISSIPATION	12 max.	watts
GRID-No.2 INPUT	2 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		←
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

Plate Voltage	180	250	315	volts
Grid-No.2 Voltage	180	250	225	volts
Grid-No.1 Voltage	-8.5	-12.5	-13	volts
Peak AF Grid-No.1 Voltage	8.5	12.5	13	volts

° With shell connected to cathode.
°° With no external shield.

←Indicates a change

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6V6, 6V6-GT
BEAM POWER AMPLIFIER

Zero-Signal Plate Current	29	45	34	ma
Max.-Signal Plate Current	30	47	35	ma
Zero-Signal Grid-No.2 Current (Approx.)	3	4.5	2.2	ma
Max.-Signal Grid-No.2 Current (Approx.)	4	7	6	ma
→ Plate Resistance (Approx.)	50000	50000	80000	ohms
Transconductance	3700	4100	3750	μmhos
Load Resistance	5500	5000	8500	ohms
Total Harmonic Distortion	8	8	12	per cent
Max.-Signal Power Output	2	4.5	5.5	watts

AF POWER AMPLIFIER—Class AB_1

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	315 max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE	315 max.	volts
GRID-No.2 VOLTAGE	285 max.	volts
PLATE DISSIPATION	12 max.	watts
GRID-No.2 INPUT	2 max.	watts
→ PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation:

Values are for 2 tubes

Plate Voltage	250	285	volts
Grid-No.2 Voltage	250	285	volts
Grid-No.1 Voltage▲	−15	−19	volts
Peak AF Grid-No.1-to-Grid-No.1 Voltage	30	38	volts
Zero-Signal Plate Current	70	70	ma
Max.-Signal Plate Current	79	92	ma
Zero-Sig. Grid-No.2 Cur. (Approx.)	5	4	ma
Max.-Sig. Grid-No.2 Cur. (Approx.)	13	13.5	ma
→ Plate Resistance (Approx.)	60000	70000	ohms
Transconductance	3750	3600	μmhos
Effective Load Resistance	10000	8000	ohms
Total Harmonic Distortion	5	3.5	per cent
Max.-Signal Power Output	10	14	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:▲		
For fixed-bias operation	0.1 max.	megohm
For cathode-bias operation	0.5 max.	megohm

▲ The type of input coupling used should not introduce too much resistance in the grid-No.1 circuit. Transformer- or impedance-coupling devices are recommended.

→ Indicates a change

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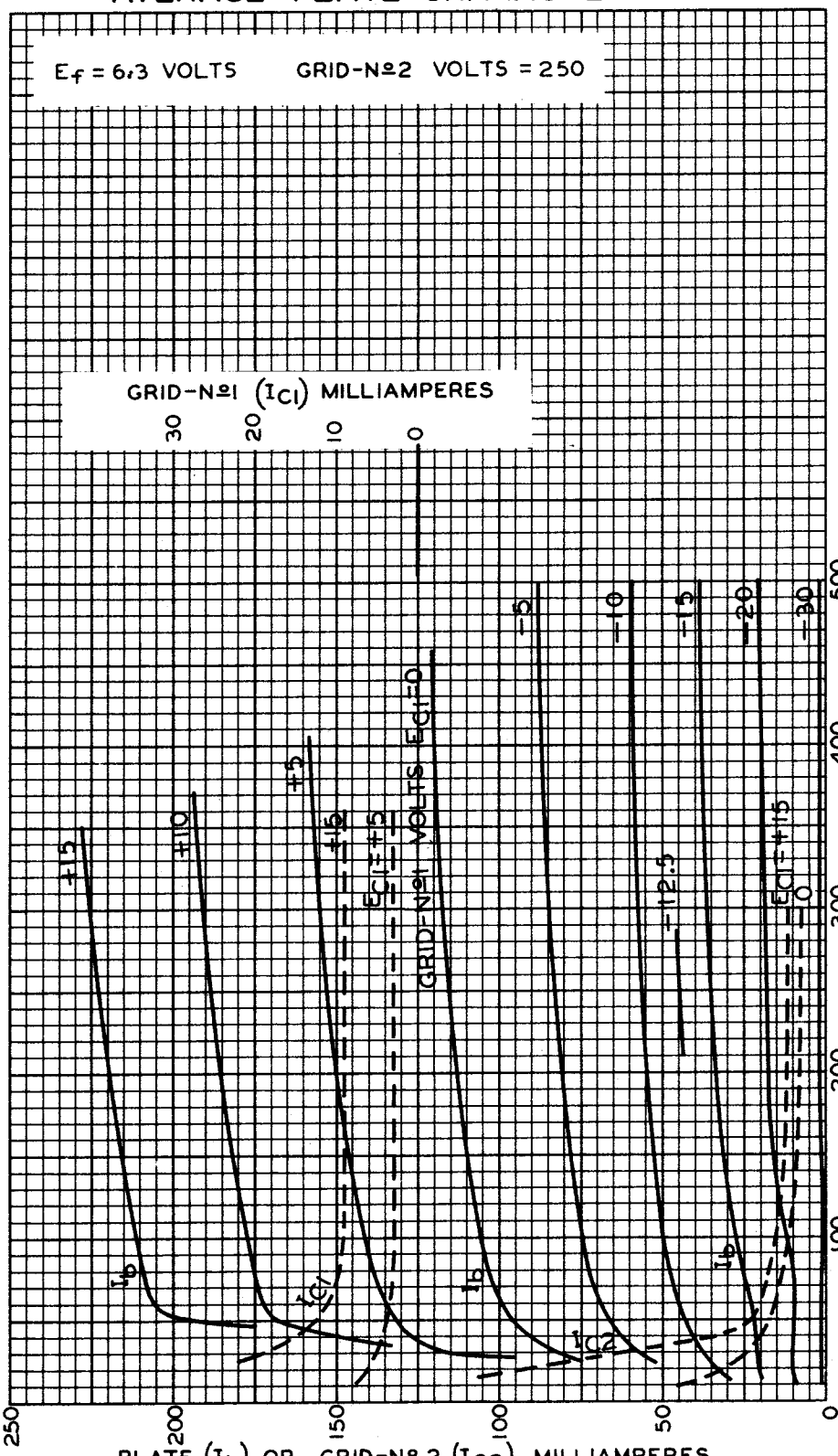
RCA

6V6

AVERAGE PLATE CHARACTERISTICS



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92CM-4807R2

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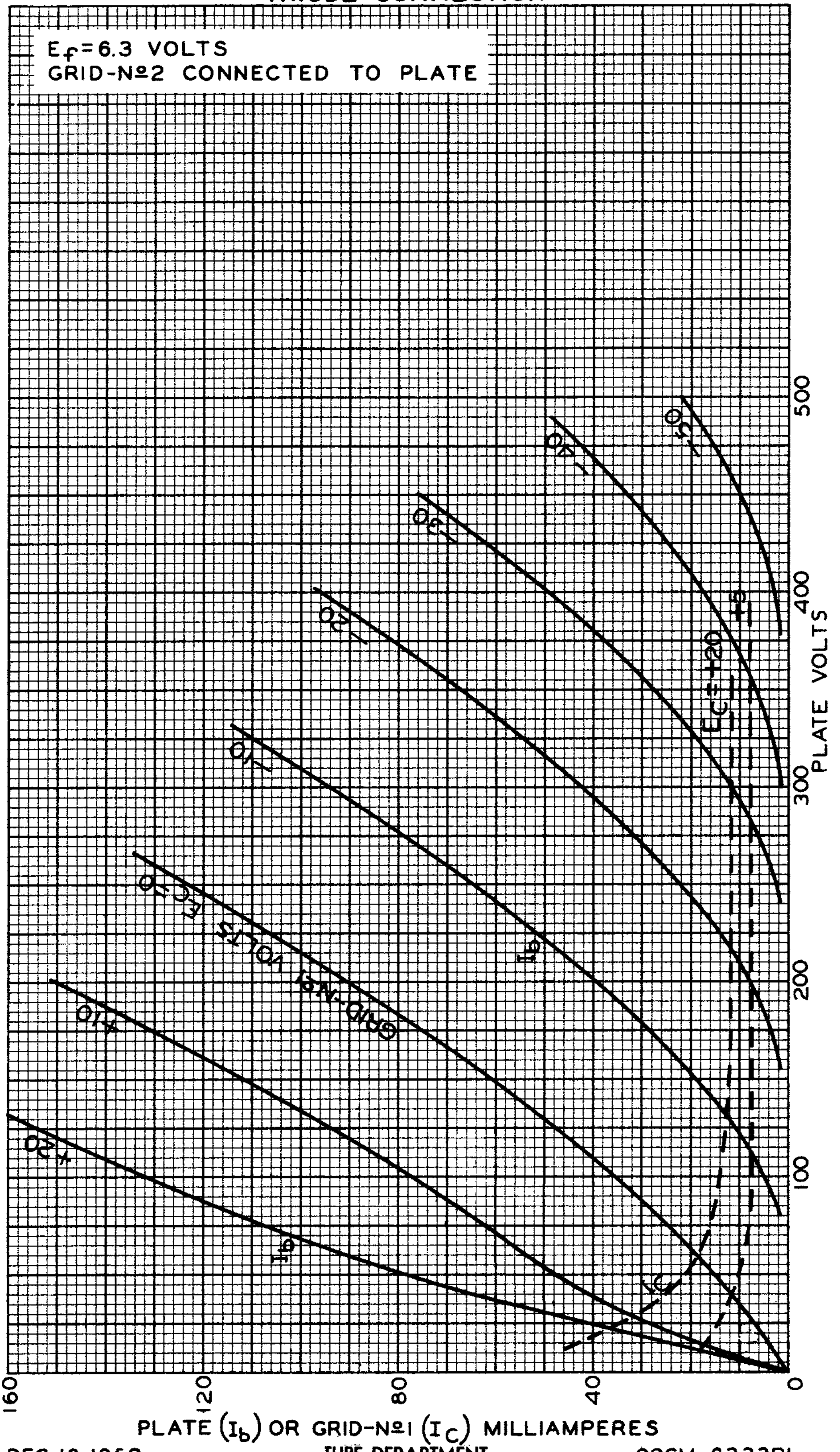
RCA

6V6

AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION



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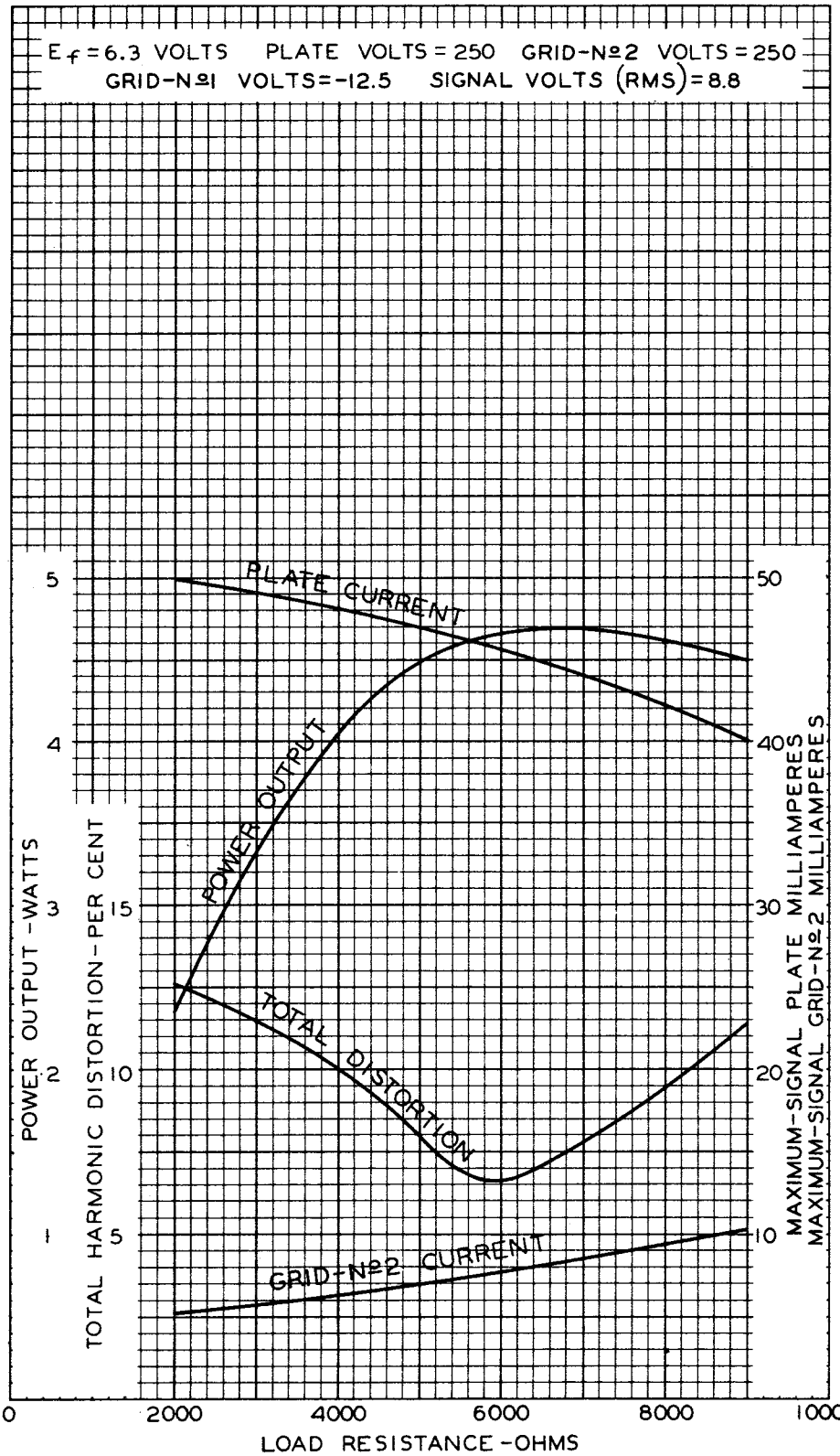
RCA

6V6

OPERATION CHARACTERISTICS



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