

6V6
6V6-GT

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 ⁰	6V6-GT ⁰⁰	
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) 7AC	Intermed.-Shell Octal 7-Pin (JETEC No. B7-7) G-7AC

Basing Designation

Pin 1 - { 6V6, Shell
6V6-GT, No
Connection

Pin 2 - Heater

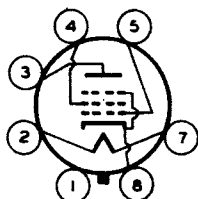
Pin 3 - Plate

Pin 4 - Grid No.2

Pin 5 - Grid No.1

Pin 7 - Heater

Pin 8 - Cathode,
Grid No.3



BOTTOM VIEW

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

⁰ With shell connected to cathode.

⁰⁰ With no external shield.

←Indicates a change

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DATA

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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 AB₁

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.

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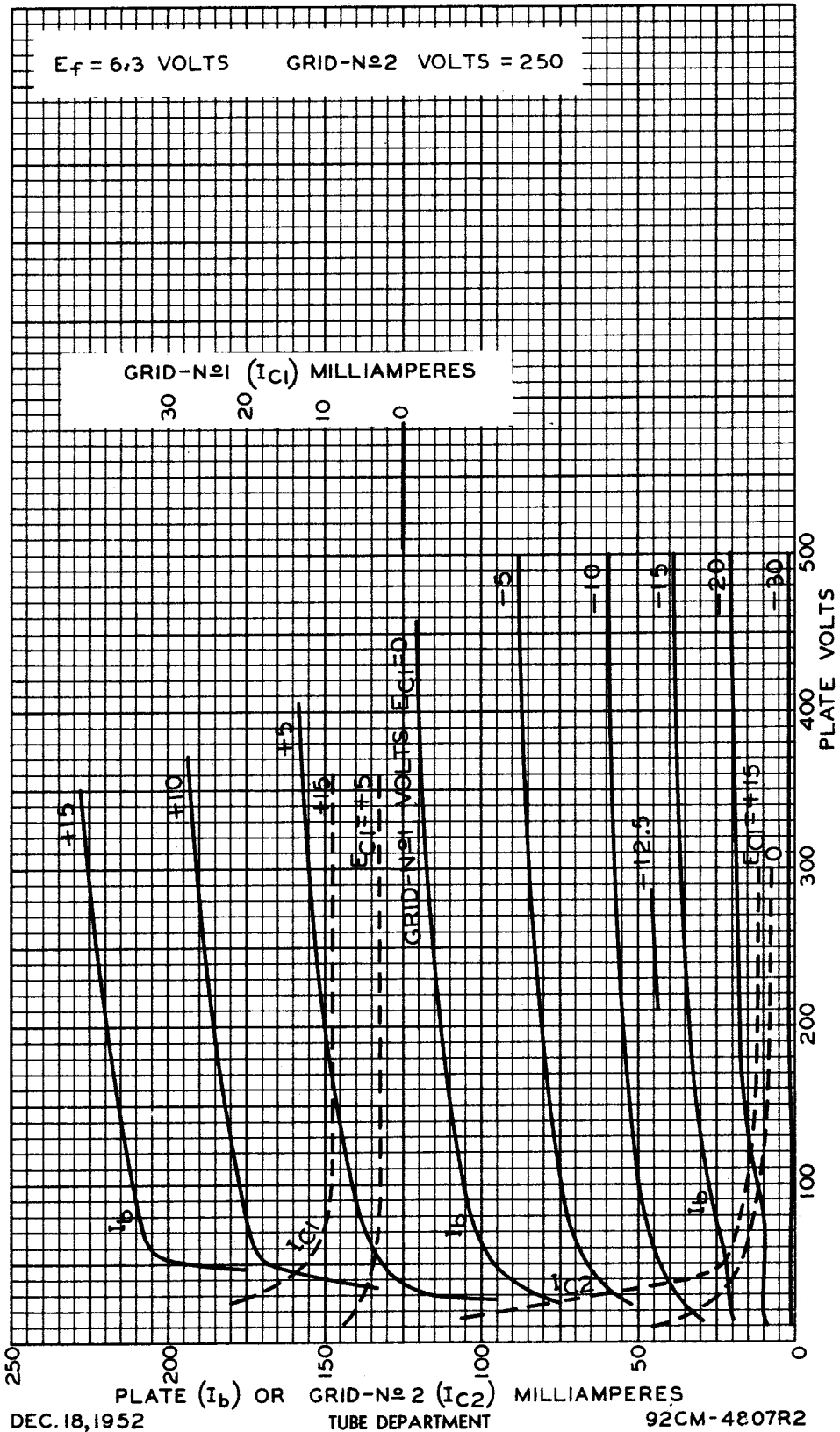
DATA



6V6

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AVERAGE PLATE CHARACTERISTICS

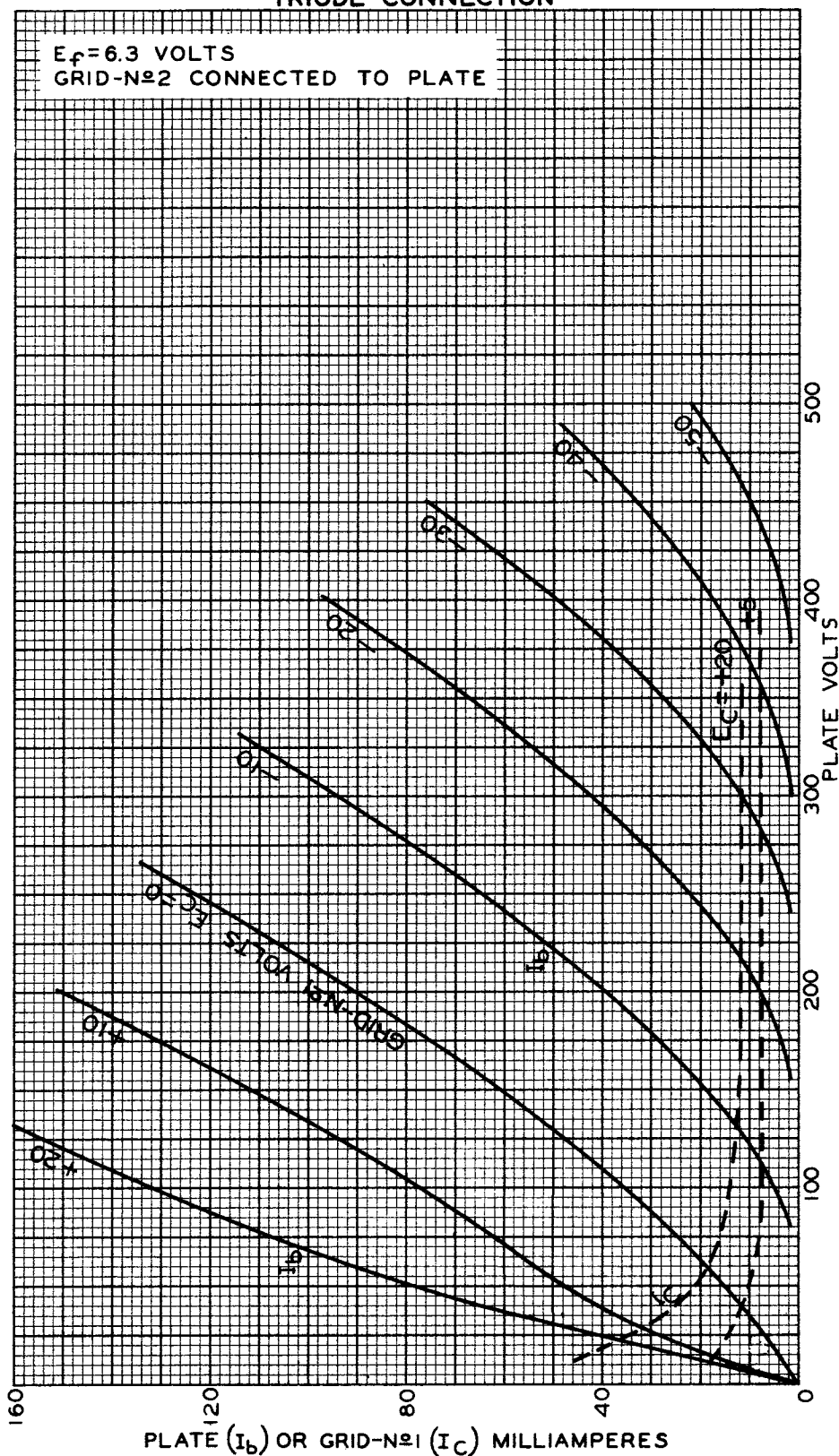


6V6



6V6

AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION

 $E_f = 6.3$ VOLTSGRID-N₂ CONNECTED TO PLATEPLATE (I_b) OR GRID-N₁ (I_c) MILLIAMPERES

DEC. 18, 1952

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92CM-6333RI

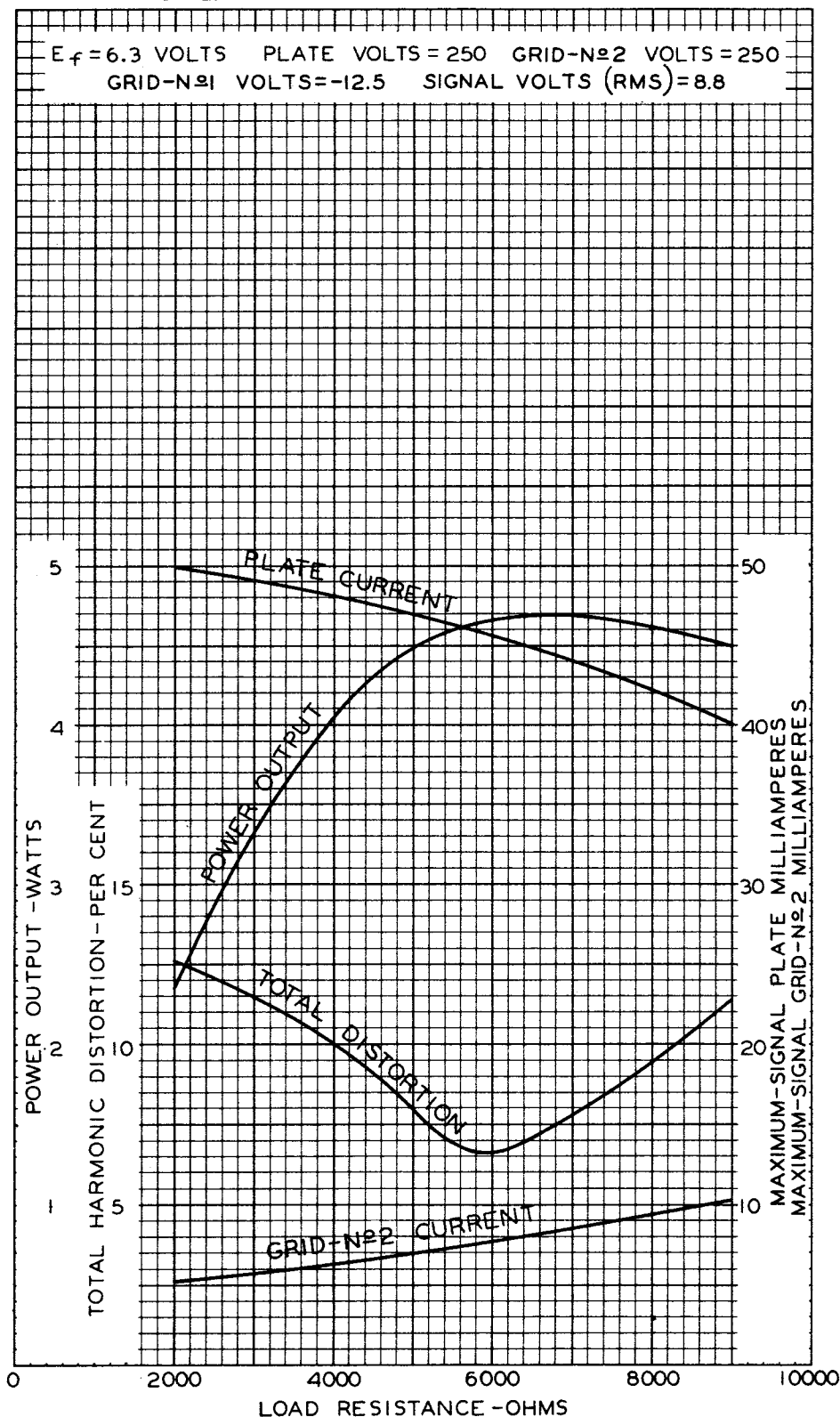


6V6

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OPERATION CHARACTERISTICS

$E_f = 6.3$ VOLTS PLATE VOLTS = 250 GRID-N $\circ$ 2 VOLTS = 250
GRID-N $\circ$ 1 VOLTS = -12.5 SIGNAL VOLTS (RMS) = 8.8



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92CM-6339R1