

Beam Power Tube

For Output Stages of Compact Audio Equipment

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC)	6.3 $\pm$ 10%	volts
Current at 6.3 volts.	1.2	amp

Direct Interelectrode Capacitances
(Approx.):[▲]

Grid No.1 to plate.	0.44	μ f
Grid No.1 to cathode & grid No.3, grid No.2, and heater	15	μ f
Plate to cathode & grid No.3, grid No.2, and heater	9	μ f

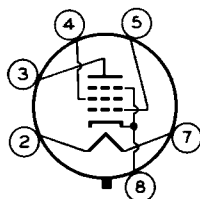
Characteristics, Class A₁ Amplifier:

Plate Supply Voltage.	130	volts
Grid-No.2 Supply Voltage.	130	volts
Cathode Resistor.	120	ohms
Plate Resistance (Approx.).	8000	ohms
Transconductance.	9500	μ mhos
Plate Current	88	ma
Grid-No.2 Current	5	ma

Mechanical:

Operating Position.	Any
Maximum Overall Length.	3-13/16"
Maximum Seated Length	3-1/4"
Maximum Diameter.	1-9/32"
Dimensional Outline	See <i>General Section</i>
Bulb.	T9
Base.	Intermediate-Shell Octal 6-Pin, Arrangement 2, (JEDEC No.B6-81)
Basing Designation for BOTTOM VIEW.	8KB

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 A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	175	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	175	max.	volts
GRID-No.2 INPUT	2.4	max.	watts
PLATE DISSIPATION	14.5	max.	watts



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PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode.	300	max.	volts
Heater positive with respect to cathode.	200 [•]	max.	volts

Typical Operation:

Fixed-Bias Operation

Plate Voltage	130	145	volts
Grid-No.2 Voltage	130	145	volts
Grid-No.1 (Control-Grid) Voltage. . .	-12.5	-16	volts
Peak AF Grid-No.1 Voltage	12.5	15	volts
Zero-Signal Plate Current	82	80	ma
Max.-Signal Plate Current	94	100	ma
Zero-Signal Grid-No.2 Current	4	4	ma
Max.-Signal Grid-No.2 Current	15	18	ma
Load Resistance	1000	1000	ohms
Total Harmonic Distortion	12	15	%
Max.-Signal Power Output.	4.2	5.6	watts

Cathode-Bias Operation

Plate Supply Voltage.	130	145	volts
Grid-No.2 Supply Voltage.	130	145	volts
Cathode Resistor.	120	150	ohms
Peak AF Grid-No.1 Voltage	11.9	15.4	volts
Zero-Signal Plate Current	88	86	ma
Max.-Signal Plate Current	90	86	ma
Zero-Signal Grid-No.2 Current	5	4.2	ma
Max.-Signal Grid-No.2 Current	9	17	ma
Load Resistance	1000	1000	ohms
Total Harmonic Distortion	10	13	%
Max.-Signal Power Output.	3.5	4.3	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

PUSH-PULL AF POWER AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE	175	max.	volts
GRID-No.2 (SCREEN-GRID) VOLTAGE	175	max.	volts
GRID-No.2 INPUT	2.4	max.	watts
PLATE DISSIPATION	14.5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	300	max.	volts
Heater positive with respect to cathode.	200 [•]	max.	volts

Typical Operation:

Values are for 2 tubes

Plate Supply Voltage.	130	145	volts
Grid-No.2 Supply Voltage.	130	145	volts



Cathode Resistor.	75	75	ohms
Peak AF Grid-No.1-to-			
Grid-No.1 Voltage	25.8	28.8	volts
Zero-Signal Plate Current	150	160	ma
Max.-Signal Plate Current	154	172	ma
Zero-Signal Grid-No.2 Current	7.2	8	ma
Max.-Signal Grid-No.2 Current	17	20	ma
Effective Load Resistance			
(Plate to plate).	1600	1600	ohms
Total Harmonic Distortion	6	6	%
Max.-Signal Power Output.	7	8.5	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

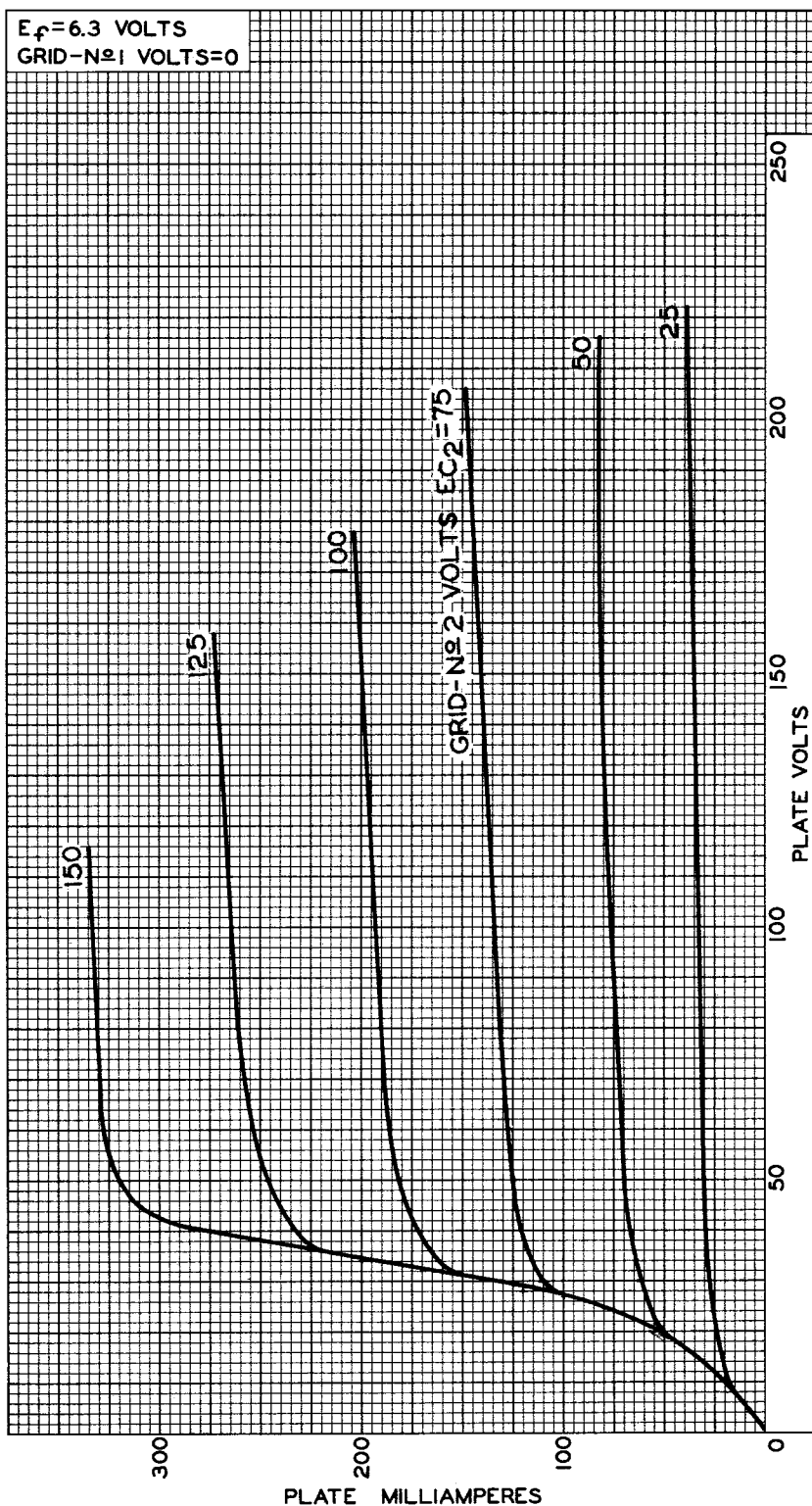
▲ Without external shield.

● The dc component must not exceed 100 volts.



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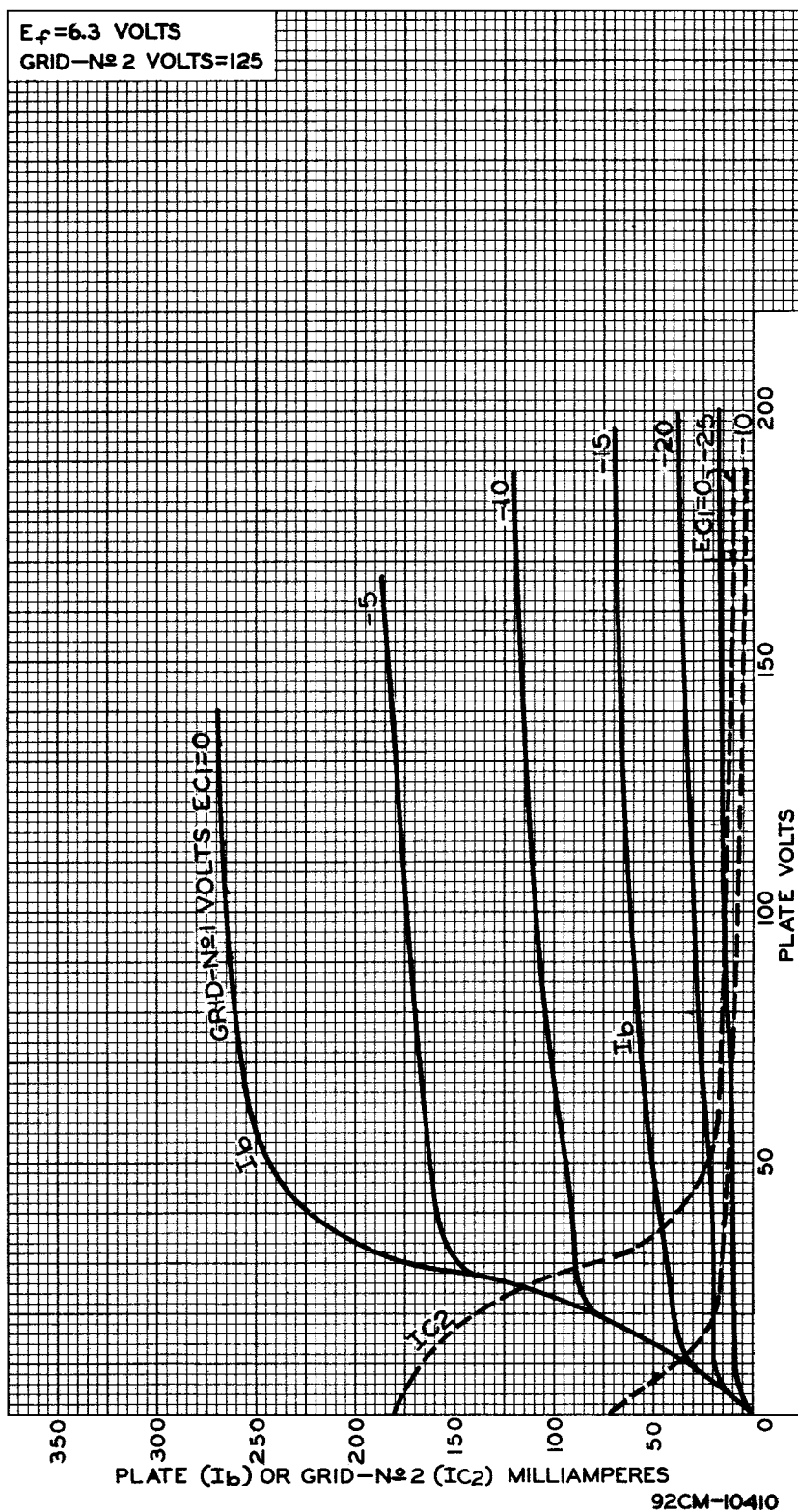
AVERAGE PLATE CHARACTERISTICS



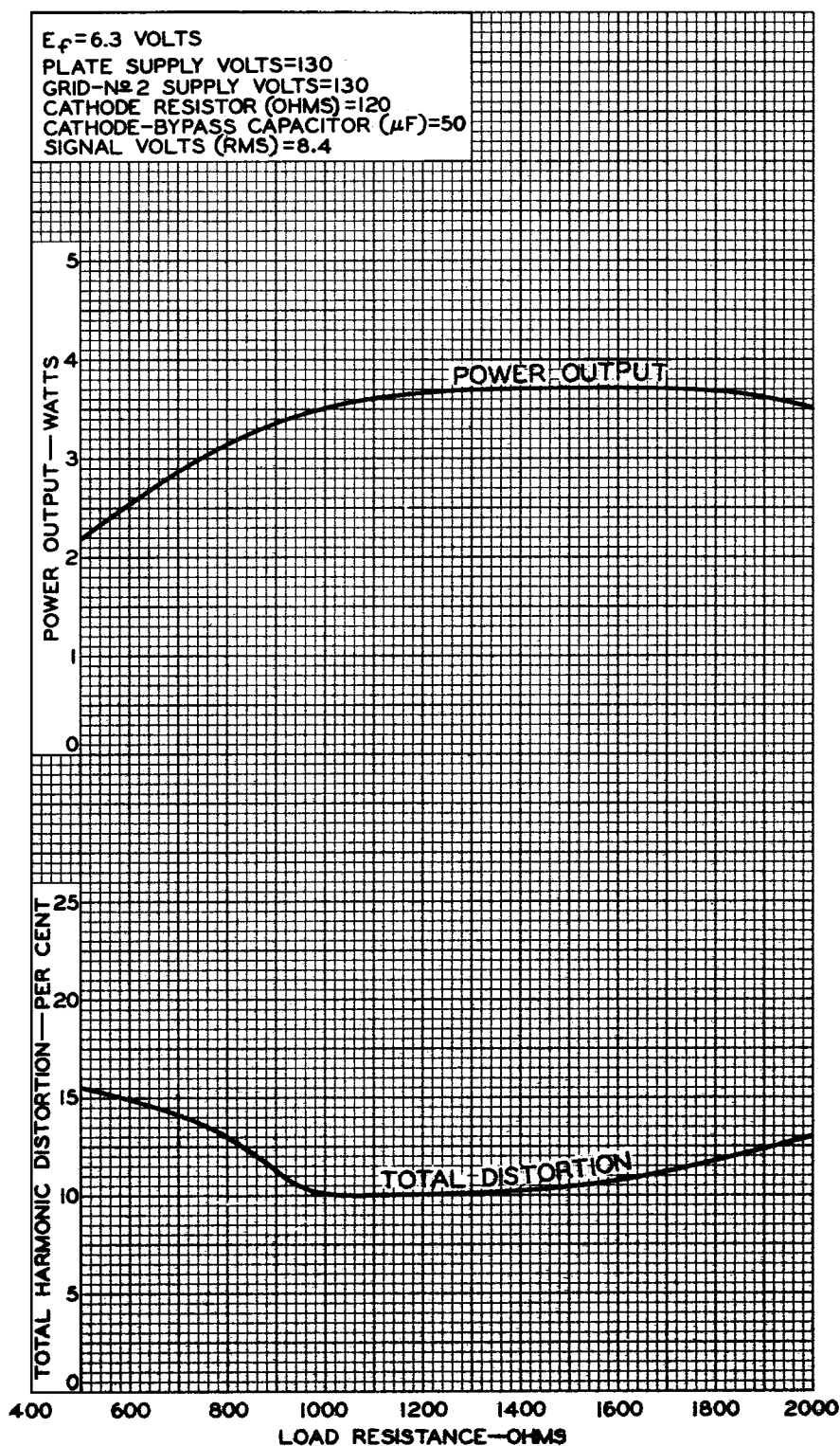
92CM-10405



AVERAGE CHARACTERISTICS



OPERATION CHARACTERISTICS



92CM-10408