

Beam Power Tube

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) $35 \pm 10\%$ volts ←

Current at 35 volts 0.15 amp

Direct Interelectrode Capacitances (Approx.):^aGrid No.1 to plate 0.6 μf Grid No.1 to cathode & grid No.3,
grid No.2, and heater 12 μf Plate to cathode & grid No.3,
grid No.2, and heater 9 μf

Mechanical:

Operating Position Any

Maximum Overall Length 2-5/8"

Maximum Seated Length 2-3/8"

Length, Base Seat to Bulb Top (Excluding tip) $2" \pm 3/32"$

Diameter 0.650" to 0.750"

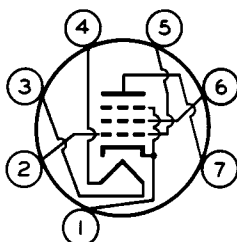
Dimensional Outline See *General Section*

Bulb T5-1/2

Base Small-Button Miniature 7-Pin (JEDEC No.E7-1)

Basing Designation for BOTTOM VIEW 7CV

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



Pin 4 - Heater
Pin 5 - Grid No.1
Pin 6 - Grid No.2
Pin 7 - Plate

AF POWER AMPLIFIER — Class A₁

Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE 150 max. volts ←

GRID-No.2 (SCREEN-GRID) VOLTAGE 130 max. volts

GRID-No.1 (CONTROL-GRID) VOLTAGE:

Positive-bias value 0 max. volts

GRID-No.2 INPUT 1.1 max. watts

PLATE DISSIPATION 5.2 max. watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with
respect to cathode 200 max. voltsHeater positive with
respect to cathode 200^b max. voltsBULB TEMPERATURE (At hottest point
on bulb surface) 250 max. °C

← Indicates a change.



35C5

Typical Operation and Characteristics:

Plate Voltage.	110	volts
Grid-No.2 Voltage.	110	volts
Grid-No.1 (Control-Grid) Voltage	-7.5	volts
Peak AF Grid-No.1 Voltage.	7.5	volts
Zero-Signal Plate Current.	40	ma
Max.-Signal Plate Current.	41	ma
Zero-Signal Grid-No.2 Current.	3	ma
Max.-Signal Grid-No.2 Current.	7	ma
Plate Resistance (Approx.)	13000	ohms
Transconductance	5800	μ mhos
Load Resistance.	2500	ohms
Total Harmonic Distortion.	10	%
Max.-Signal Power Output	1.5	watts

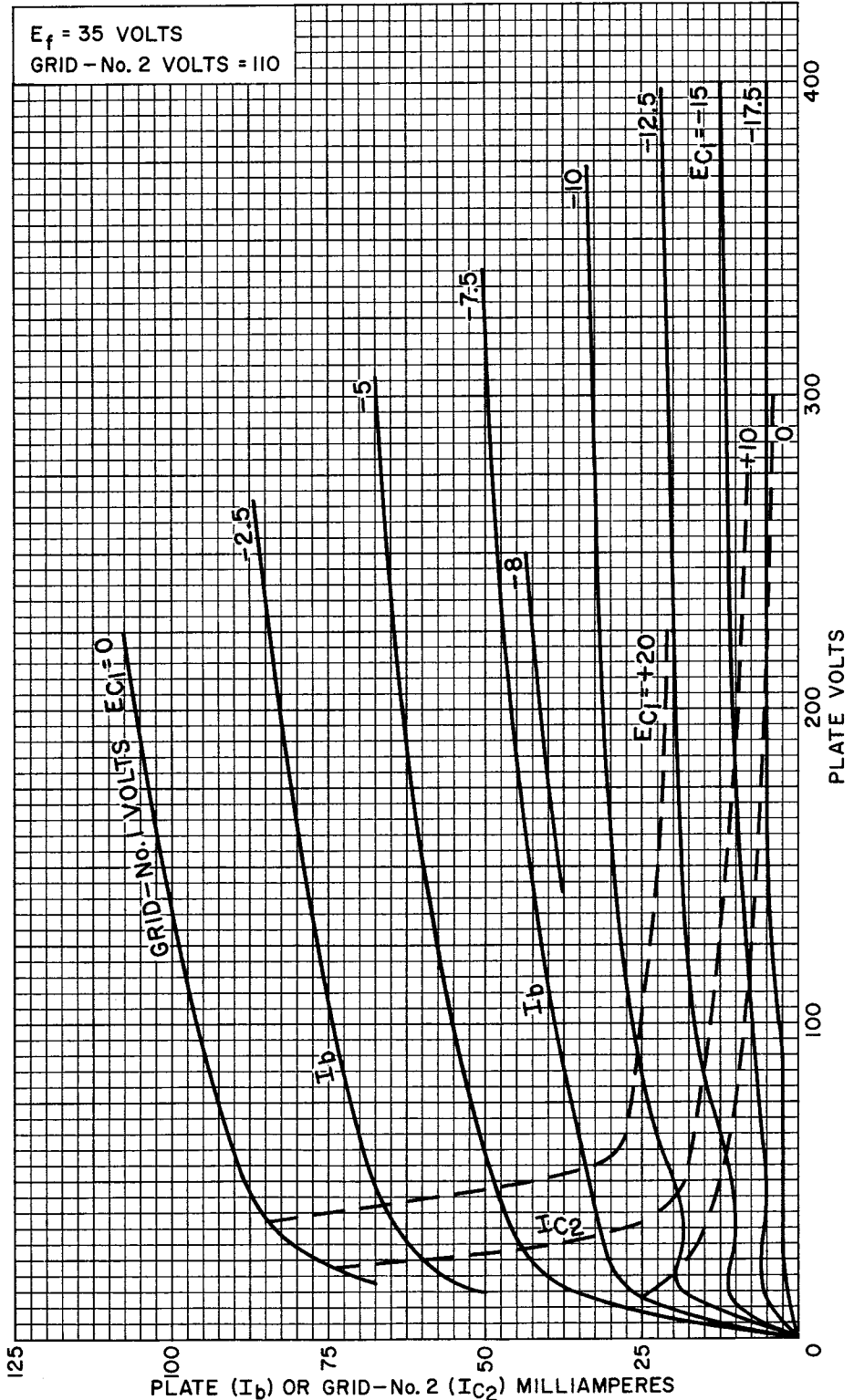
Maximum Circuit Values:

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

- ^a Without external shield.
- ^b The dc component must not exceed 100 volts.

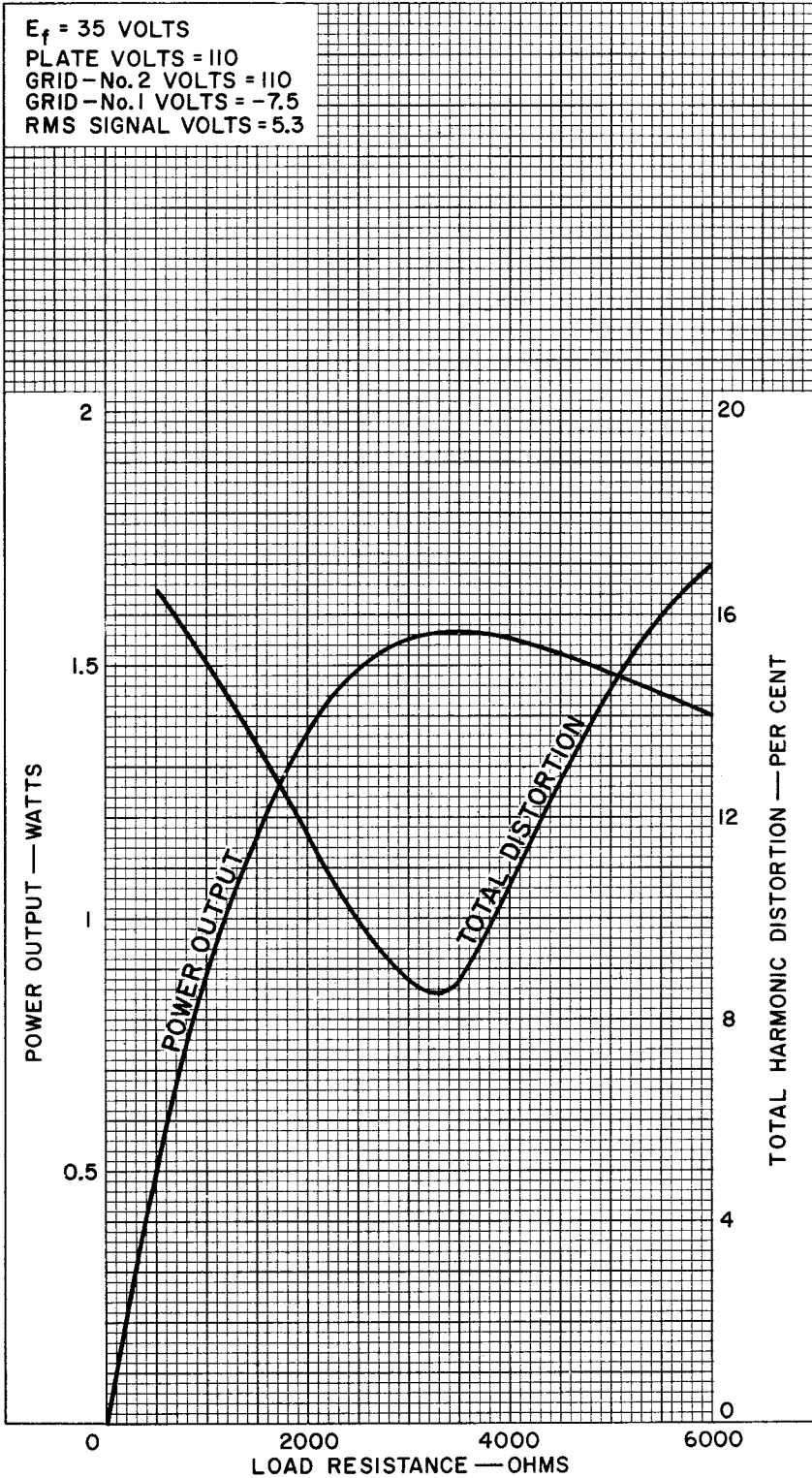


AVERAGE CHARACTERISTICS



OPERATION CHARACTERISTICS

$E_f = 35$ VOLTS
PLATE VOLTS = 110
GRID-NO. 2 VOLTS = 110
GRID-NO. 1 VOLTS = -7.5
RMS SIGNAL VOLTS = 5.3



92CM-6794

