

Power Pentode

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

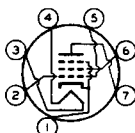
Direct Interelectrode Capacitances
(Approx.):[▲]

Grid No.1 to plate	0.65	μ f
Grid No.1 to cathode & grid No.3, grid No.2, and heater	17	μ f
Plate to cathode & grid No.3, grid No.2, and heater	9	μ f

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 <i>General Section</i>
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	1.75	max.	watts
PLATE DISSIPATION	5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200*	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	225	max.	°C



35EH5

Typical Operation and Characteristics:

Plate Supply Voltage.	110	volts
Grid-No.2 Supply Voltage.	115	volts
Cathode Resistor.	62	ohms
Peak AF Grid-No.1 Voltage	3	volts
Zero-Signal Plate Current	32	ma
Max.-Signal Plate Current	32	ma
Zero-Signal Grid-No.2 Current	7.2	ma
Max.-Signal Grid-No.2 Current	12	ma
Plate Resistance (Approx.).	14000	ohms
Transconductance.	12000	μ mhos
Load Resistance	3000	ohms
Total Harmonic Distortion	8	%
Max.-Signal Power Output.	1.2	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

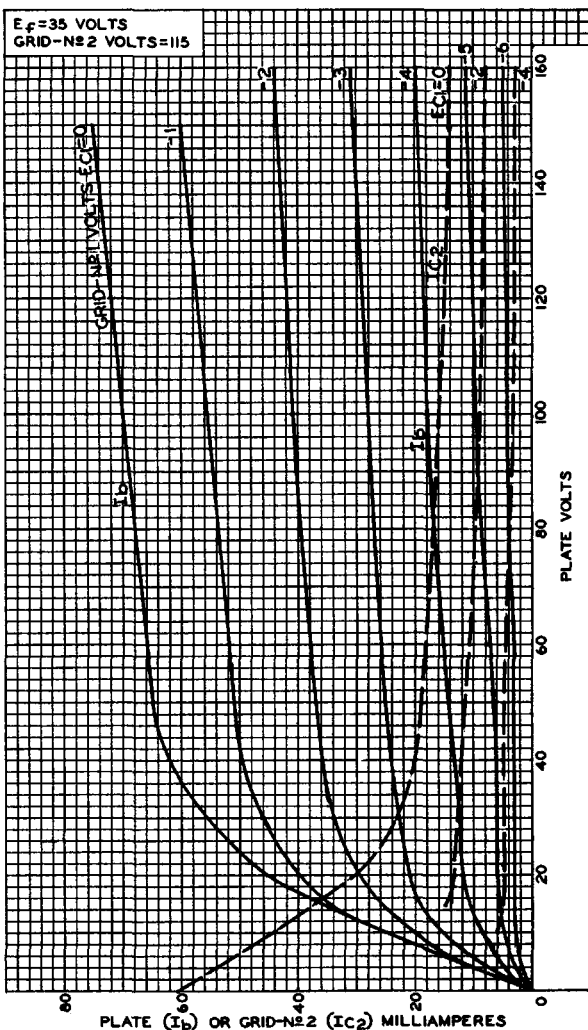
For fixed-bias operation.	0.1 max.	megohm
For cathode-bias operation.	0.5 max.	megohm

▲ Without external shield.

● The dc component must not exceed 100 volts.



AVERAGE CHARACTERISTICS

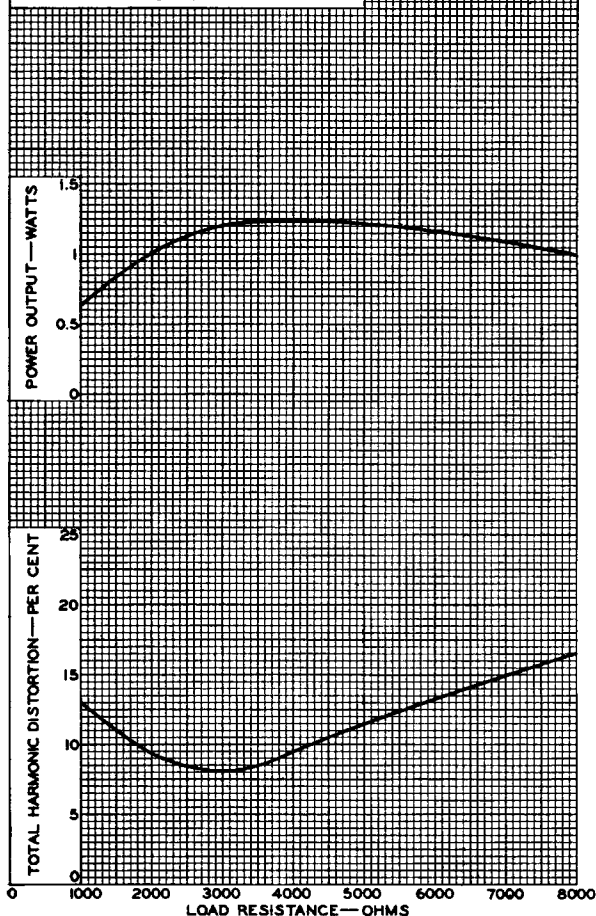


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OPERATION CHARACTERISTICS

$E_f \approx 35$ VOLTS
 PLATE SUPPLY VOLTS = 110
 GRID-N₂ SUPPLY VOLTS = 115
 CATHODE RESISTOR (OHMS) = 62
 CATHODE-BYPASS CAPACITOR (μf) = 100
 SIGNAL VOLTS (RMS) = 2.1



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