

Power Pentode

7-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

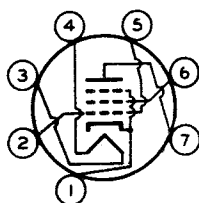
Heater, for Unipotential Cathode:

Voltage (AC or DC)	50	volts
Current	$0.1 \pm 6\%$	amp
Direct Interelectrode Capacitances (Approx.): [▲]		
Grid No.1 to plate	0.65	μf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	17	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 <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

Typical Operation and Characteristics:

Plate Supply Voltage	110	volts
Grid-No.2-Supply Voltage	115	volts
Cathode Resistor	62	ohms



50FK5

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.	8.5	ma
Max.-Signal Grid-No.2 Current.	12	ma
Plate Resistance (Approx.)	14000	ohms
Transconductance	12800	μ mhos
Load Resistance.	3000	ohms
Total Harmonic Distortion.	8	%
Max.-Signal Power Output	1.2	watts

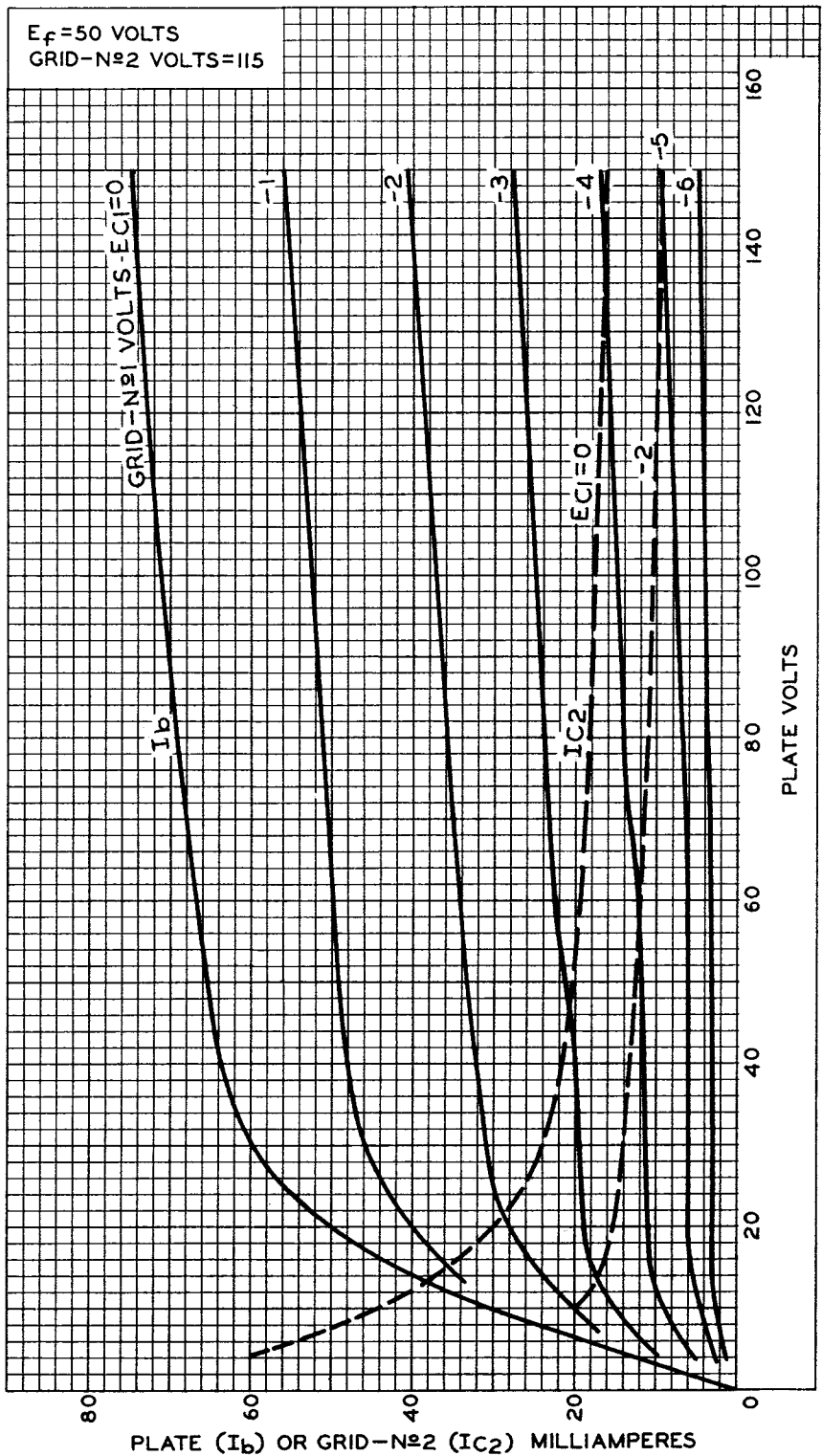
Maximum Circuit Values:

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

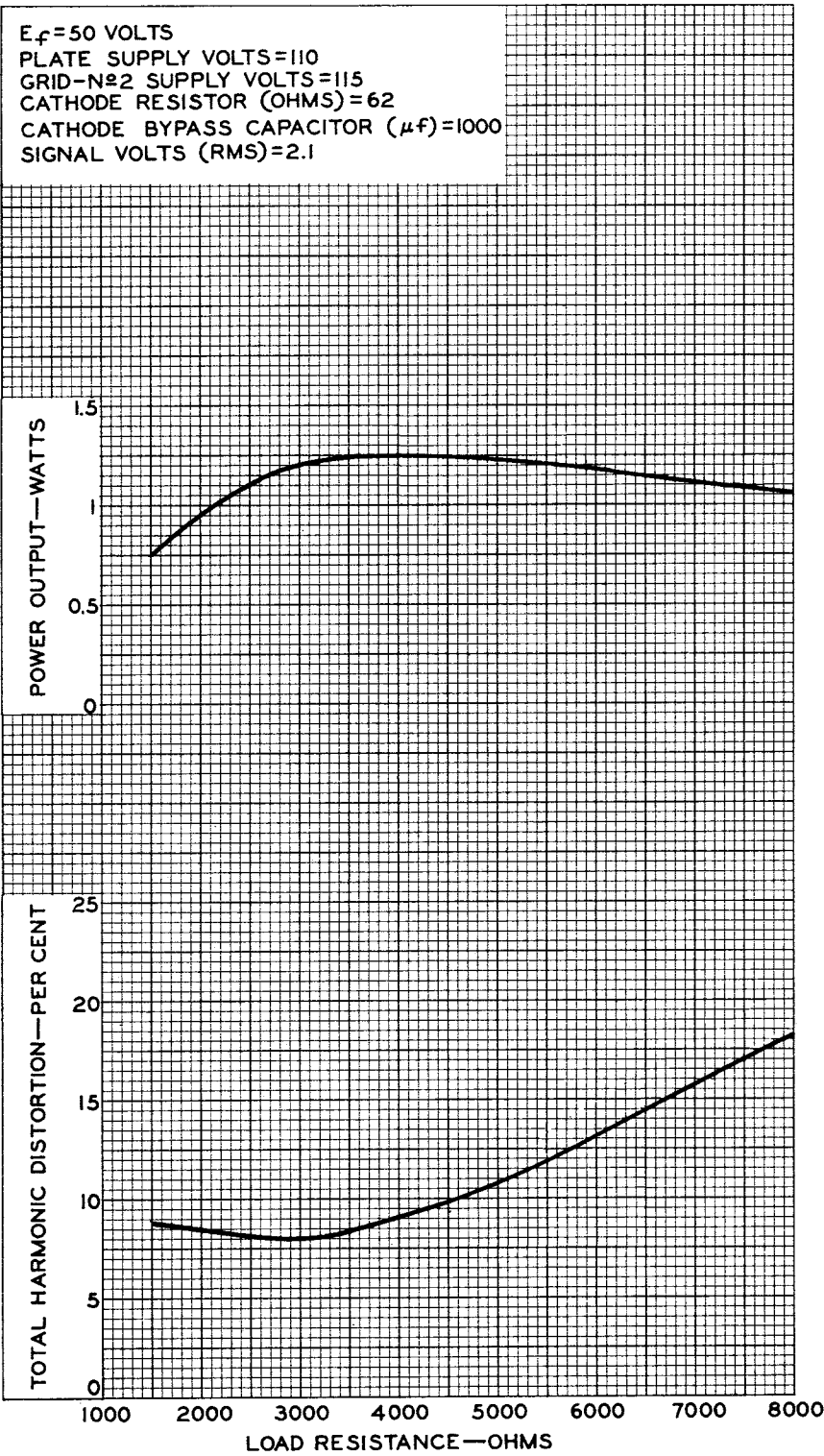


92CM-10786



50FK5

OPERATION CHARACTERISTICS



92CM-10784

