



6AF4

6AF4

UHF OSCILLATOR TRIODE

MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.225	amp

Resonant Frequency (Approx.)	1000	Mc
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Direct Interelectrode Capacitances (No external shield):

Grid to Plate	1.9	μmf
Grid to Cathode and Heater	2.2	μmf
Plate to Cathode and Heater	0.45	μmf

Characteristics—Class A₁ Amplifier:

Plate Voltage	80	100	volts
Cathode-Bias Resistor	150	150	ohms
Amplification Factor	15	16	
Plate Resistance	2270	2130	ohms
Transconductance	6600	7500	μmhos
Plate Current	16	20	ma

Mechanical:

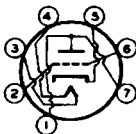
Mounting Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" $\pm$ 3/32"
Maximum Diameter	3/4"
Bulb	T-5-1/2
Base	Small-Button Miniature 7-Pin (JETEC No. E7-1)
Basing Designation for BOTTOM VIEW	7DK

Pin 1—Plate

Pin 2—Grid

Pin 3—Heater

Pin 4—Heater



Pin 5—Cathode

Pin 6—Grid

Pin 7—Plate

OSCILLATOR IN UHF TELEVISION RECEIVERS

Maximum Ratings, Design-Center Values:

DC PLATE VOLTAGE	150 max.	volts
DC GRID VOLTAGE	-50 max.	volts
DC GRID CURRENT	8 max.	ma
PLATE INPUT	2.5 max.	watts
PLATE DISSIPATION	2.25 max.	watts
DC CATHODE CURRENT	28 max.	ma
PEAK HEATER-CATHODE VOLTAGE: ♦		
Heater negative with respect to cathode	80 max.	volts
Heater positive with respect to cathode	80 max.	volts

♦: See next page.

JULY 1, 1952

TUBE DEPARTMENT

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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Typical Operation as Oscillator at 950 Mc:

DC Plate Voltage	100	volts
DC Grid Voltage	-4	volts
From a grid resistor of	10000	ohms
DC Plate Current	22	ma
DC Grid Current (Approx.)	400	μamp
Useful Power Output	160	milliwatts

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation	Not recommended
For cathode-bias operation	0.5 max. megohm

- ♦ It is recommended that the heater be kept at cathode potential to minimize the effects of variation in the heater-to-cathode capacitance between tubes.

OPERATING CONSIDERATIONS

The mounting arrangement should insure that the tube is held secure by its socket. Unless this recommendation is followed, the generated frequency may change by as much as 10 megacycles per second. Use of a conventional miniature tube shield and external clamping arrangement are recommended.

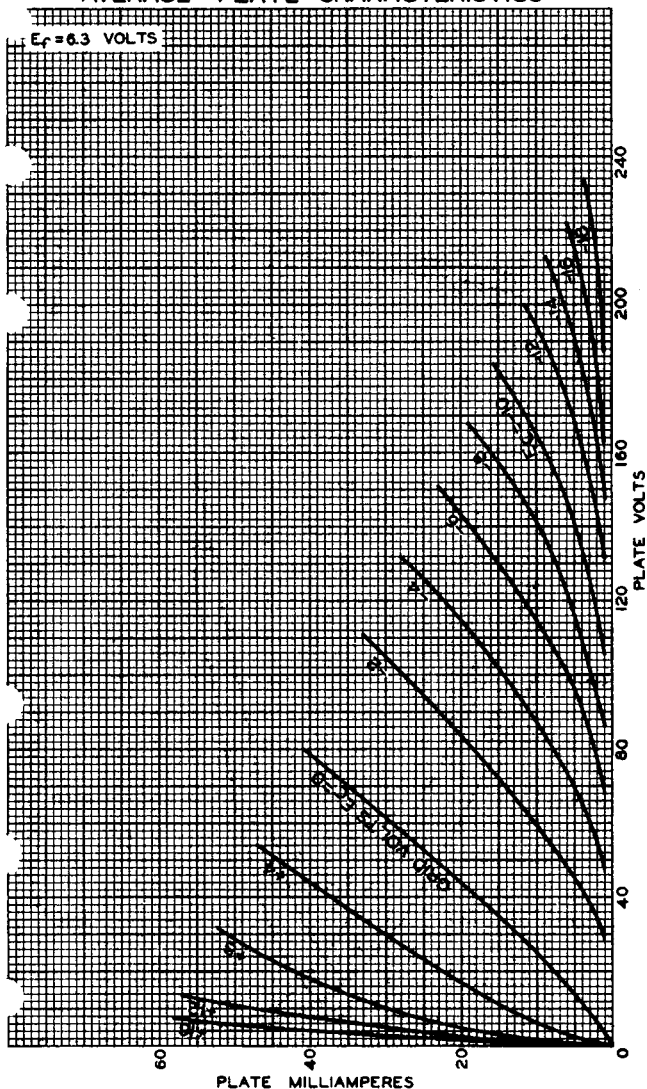
The base pins of the 6AF4 fit the miniature 7-contact socket. The socket should be of the mica-filled, rubber, or ceramic type.



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AVERAGE PLATE CHARACTERISTICS



FEB. 20, 1952

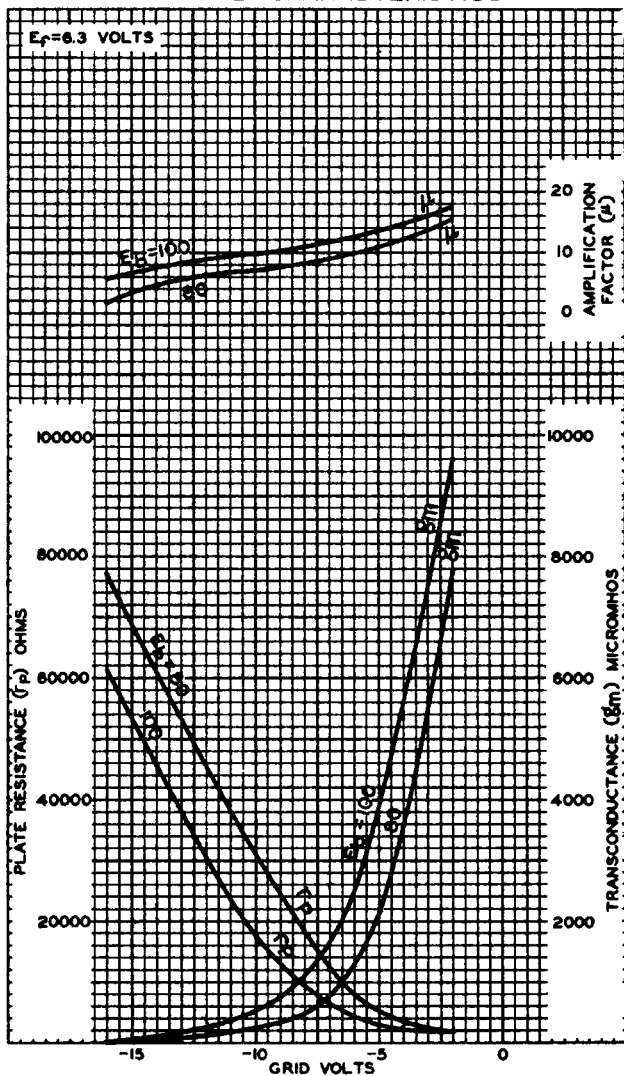
TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7756

6AF4

RCA
6AF4

AVERAGE CHARACTERISTICS



FEB. 26, 1952

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

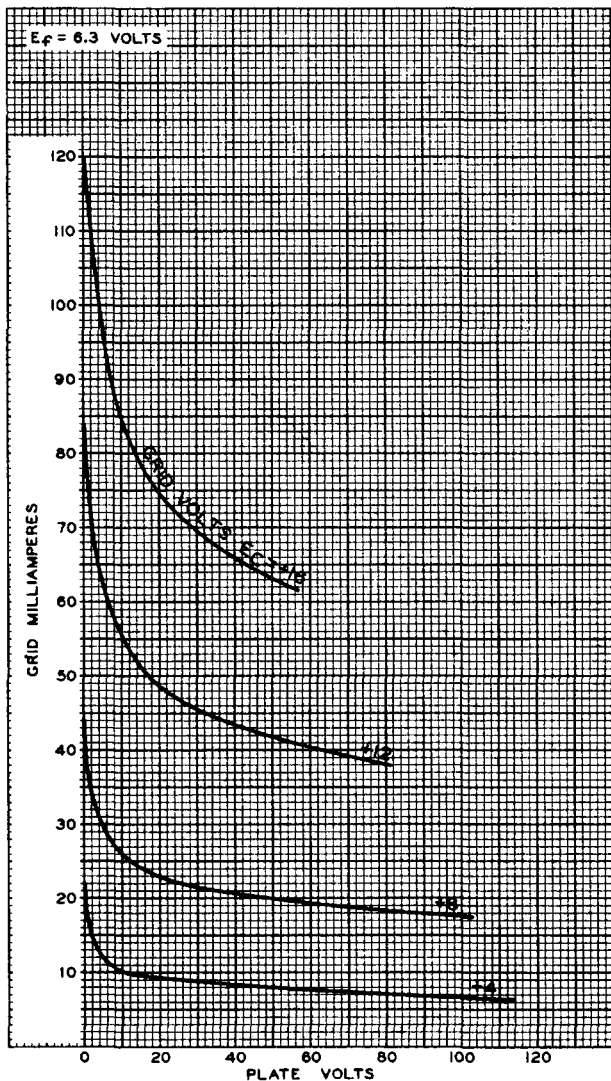
92CM-7756



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AVERAGE CHARACTERISTICS

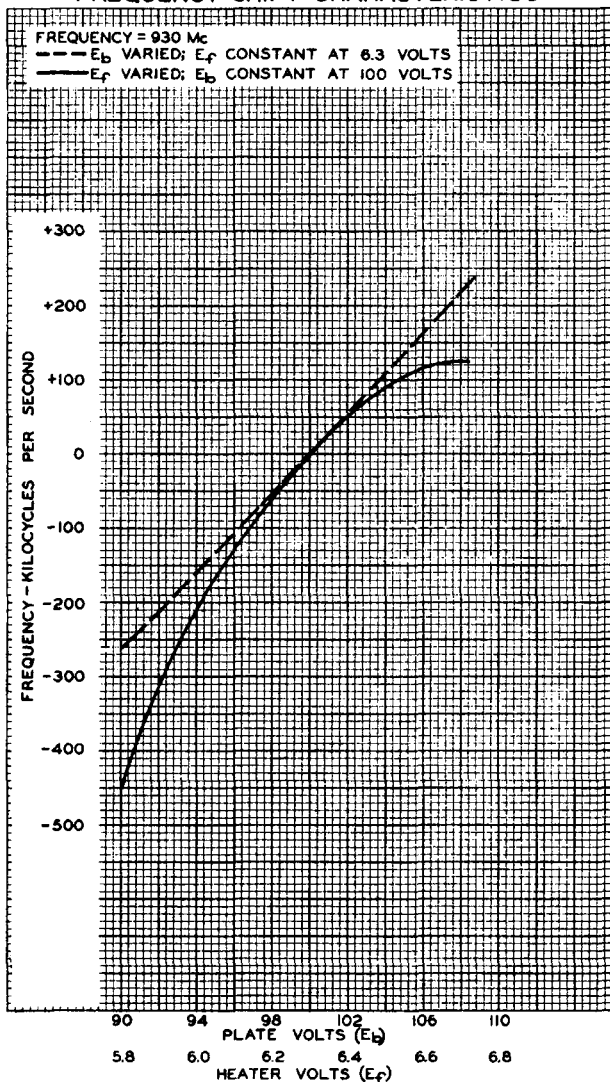


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6AF4

FREQUENCY SHIFT CHARACTERISTICS





6AF4

MEDIUM-MU TRIODE

MINIATURE TYPE

For UHF TV service

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The 6AF4 is the same as the 6AF4-A except for the following mechanical dimensions:

Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip). . .	1-1/2" $\pm 3/32$ "