

6AF4-A-2AF4-A-3AF4-A

TRIODE

FOR UHF OSCILLATOR APPLICATIONS

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DESCRIPTION AND RATING =

The 6AF4-A is a miniature medium-mu triode designed for use as a UHF oscillator in television receivers. Features of the tube include low interelectrode capacitances, low internal lead inductances, and short transit time.

The 2AF4-A and 3AF4-A are essentially equivalent to the 6AF4-A, except for heater ratings. In addition, the 2AF4-A and 3AF4-A incorporate a controlled heater-warm-up characteristic which makes them especially suited for use in television receivers that employ series-connected heaters.

Except for bulb length, the 6AF4-A and 2AF4-A are identical to the 6AF4 and 2AF4.

GENERAL

2AF4-A 3A	F4-A	6AF4-A
. 2.35	3.2	$6.3 \pm 10\%$ Volts
$.0.6 \pm 6\%$	0.45	0.225 Amperes
. 11	11	Seconds
<i>.</i>		1 . 9 μμf
		2.2 μμf
		1.4 μμf
		2.2 μμf
	2.35 .0.6 ± 6% . 11	$0.6 \pm 6\%$ 0.45

MECHANICAL

Mounting Position—Any Envelope—T-5½, Glass

Base—E7-1, Miniature Button 7-Pin

MAXIMUM RATINGS

DESIGN-MAXIMUM VALUES	
Plate Voltage) Volts
Negative DC Grid Voltage50) Volts
Plate Dissipation	
DC Grid Current	Milliamperes .
DC Cathode Current	Milliamperes
Heater-Cathode Voltage	•
Heater Positive with Respect to Cathode	
DC Component	5 Volts
Total DC and Peak50) Volts
Heater Negative with Respect to Cathode	
Total DC and Peak) Volts

Design-Maximum Ratings are the limiting values expressed with respect to bogie tubes at which satisfactory tube life can be expected to occur. To obtain satisfactory circuit performance, therefore, the equipment designer must establish the circuit design so that no design-maximum value is exceeded with a bogie tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, and environmental conditions.



Supersedes ET-T1257, dated 1-56

BASING DIAGRAM

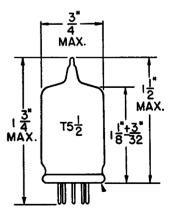


RETMA 7DK

TERMINAL CONNECTIONS

Pin 1—Plate
Pin 2—Grid
Pin 3—Heater
Pin 4—Heater
Pin 5—Cathode
Pin 6—Grid
Pin 7—Plate

PHYSICAL DIMENSIONS



RETMA 5-1

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CHARACTERISTICS AND TYPICAL OPERATION

AVERAGE CHARACTERISTICS	Δ١	VER A	GE	CHAR	AC	TERIST	ICS
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Plate Voltage		80 Volts
Cathode-Bias Resistor		150 Ohms
Amplification Factor		13 . 5
Plate Resistance, approximate		2100 Ohms
Transconductance		6500 Micromhos
Plate Current		17.5 Milliamperes
	2AF4-A	
UHF OSCILLATOR SERVICE§	3AF4-A	6AF4-A
Plate Supply Voltage	100	100 Volts

220 Ohms

17 Milliamperes

1000 Megacycles

10000 Ohms

220

Plate Resistor....

 Plate Current
 17.5

 Frequency
 1000

^{*} The time required for the voltage across the heater to reach 80 percent of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times the rated heater voltage divided by the rated heater current.

[†] With external shield (RETMA 316) connected to pin 5 unless otherwise indicated.

With external shield (RETMA 316) connected to pin 1.

[§] Measured in JETEC standard UHF oscillator No. 400.

