

MEDIUM-MU TRIODE TYPES 2AF4, 2AF4-A, 3AF4-A, 6AF4 AND 6AF4-A

The 2AF4, 2AF4-A, 3AF4-A, 6AF4 and 6AF4-A are miniature 7-pin medium-mu triodes designed for local oscillator service in television receivers which operate in the ultra-high-frequency region. Internal lead inductance is reduced by employing double connections to the plate and grid.

The 2AF4, 2AF4-A and 3AF4-A have been designed for use in receivers which employ series connected heaters, especially in television receivers where the picture-tube heater is in series with other heaters. When each is employed in this type of circuit with other tubes similarly designed having the same heater current rating, heater voltage surges across individual tubes are minimized inasmuch as heater warm-up characteristic is controlled.

GENERAL DATA

ELECTRICAL:

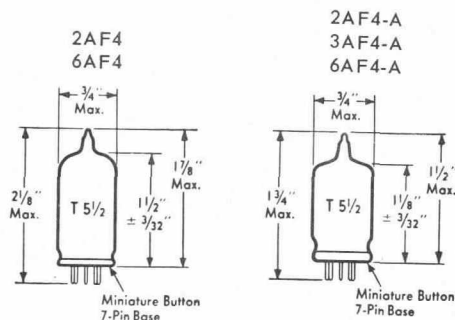
Cathode.....	Coated Unipotential			
Heater:	2AF4	3AF4-A	6AF4	
	2AF4-A	6AF4-A		
Voltage (ac or dc)	2.35	3.2	6.3	Volts
Current	0.6 §	0.45 §	225	Ampere
Warm-Up Time ●.....	11	11	-	Seconds
Direct Interelectrode Capacitances:				
Grid to Plate □			1.9	uuf
Input □.....			2.2	uuf
Output □.....			1.4	uuf
Heater to Cathode ▲			2.2	uuf
Resonant Frequency (approx.).....			1000	Mc.

MECHANICAL:

Bulb	T-5-1/2
Base	Miniature 7-Pin (JETEC E7-1)
Basing	7DK
Mounting Position	Any
Outline:	
2AF4, 6AF4	5-2
2AF4-A, 3AF4-A, 6AF4-A	5-1

- Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three times rated heater voltage divided by rated heater current

§ ± 6%



UHF OSCILLATOR SERVICE

MAXIMUM RATINGS:

Design Maximum Values

DC Plate Voltage	150	max.	Volts
DC Grid Voltage	-50	max.	Volts
DC Grid Current	2	max.	Ma.
Plate Input	2.5	max.	Watts
Plate Dissipation	2.5	max.	Watts
DC Cathode Current	24	max.	Ma.
Heater-Cathode Voltage:			
Heater Negative with Respect to Cathode:			
Total DC + Peak	50	max.	Volts
Heater Positive with Respect to Cathode:			
DC Component	25	max.	Volts
Total DC + Peak	50	max.	Volts
Grid-Circuit Resistance:			
Fixed-Bias Operation	Not Recommended		
Cathode-Bias Operation	0.5	max.	Megohm

TYPICAL OPERATION at 1000 Mc:

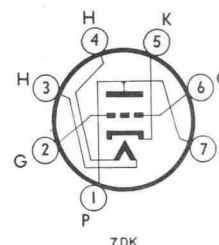
Plate Supply Voltage	100	Volts
Plate Resistor	220	Ohms
Grid Resistor	10000	Ohms
Plate Current	17	Ma.
Grid Current	750	uamp

CHARACTERISTICS as Class A Amplifier:

Plate Voltage	80	Volts
Cathode Bias Resistor	150	Ohms
Amplification Factor	13.5	
Plate Resistance	2100	Ohms
Transconductance	6500	umhos
Plate Current	17.5	Ma.

□ JETEC Shield No. 316 connected to Pin 5

▲ JETEC Shield No. 316 connected to Pin 1



Supersedes 2AF4 Data Sheet Dated November 5, 1954

Supersedes 2AF4-A Data Sheet Dated April 1, 1955

Supersedes 6AF4 Data Sheet Dated May 1, 1954

Supersedes 6AF4-A Data Sheet Dated July 20, 1954

Receiving Tube Section

