

6AE5GT

Refer to chart at end of section.

6AE6G

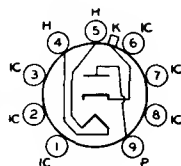
Refer to chart at end of section.

6AE7GT

Refer to chart at end of section.

6AF3**12AF3****HALF-WAVE
VACUUM RECTIFIER**

Miniature type used as a damper tube in horizontal-deflection circuits of television receivers. Outlines section, 7C; requires miniature 9-contact socket. Socket terminals 1, 2, 3, 6, 7, and 8 should not be used as tie points. It is especially important that this tube, like other power-handling tubes, be adequately ventilated. Type 12AF3 is identical with type 6AF3 except for heater ratings.

**9CB**

	6AF3	12AF3	
Heater Voltage (ac/dc)	6.3	12.6	volts
Heater Current	1.2	0.6	amperes
Heater Warm-up Time (Average)	—	11	seconds

Damper Service

For operation in a 525-line, 30-frame system

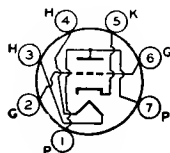
MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage*	4500	volts
Peak Plate Current	750	mA
Average Plate Current	185	mA
Bulb Temperature (At hottest point)	210	°C
Heater-Cathode Voltage:		
Peak value	+300 —4500	volts
Average value	+100 —1000	volts

* Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

6AF4**6AF4A****2AF4B/2DZ4,
3AF4A/3DZ4****MEDIUM-MU TRIODE**

Miniature types used as local oscillators in uhf television receivers covering the frequency range of 470 to 890 MHz. Outlines section, 5C and 5B, respectively; requires miniature 7-contact socket. Types 2AF4B/2DZ4 and 3AF4A/3DZ4 are identical with type 6AF4A except for heater and heater-cathode ratings.

**7DK**

	2AF4B/ 2DZ4	3AF4A/ 3DZ4	6AF4 6AF4A	
Heater Voltage (ac/dc)	2.35	3.15	6.3	volts
Heater Current	0.6	0.45	0.225	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Heater-Cathode Voltage:				
Peak value	±180 max	±50 max	±50 max	volts
Average value	100 max	25 max	25 max	volts
Direct Interelectrode Capacitances:*				
Grid to Plate			1.9	pF
Grid to Cathode and Heater			2.2	pF
Plate to Cathode and Heater			1.4	pF
Heater to Cathode (External Shield connected to plate)			2.2	pF

* With external shield connected to cathode, except as noted.

Class A₁ Amplifier**CHARACTERISTICS**

Plate Supply Voltage	80	volts
Cathode-Bias Resistor	150	ohms
Amplification Factor	13.5	
Plate Resistance (Approx.)	2100	ohms
Transconductance	6500	μmhos
Plate Current	17.5	mA

UHF Oscillator

MAXIMUM RATINGS (Design-Maximum Values)

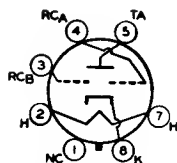
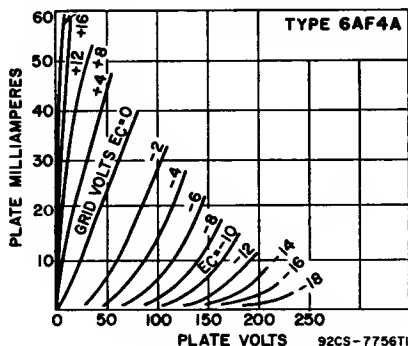
Plate Voltage	150	volts
Grid Voltage, Negative-bias value	50	volts
Grid Current	2	mA
Plate Dissipation	2.5	watts
Average Cathode Current	24	mA

TYPICAL OPERATION AS OSCILLATOR AT 1000 MHz

Plate Supply Voltage	100	volts
Plate Resistor	220	ohms
Grid Resistor	10000	ohms
Plate Current	17	mA
Grid Current (Approx.)	750	μ A

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:		
For fixed-bias operation		Not recommended
For cathode-bias operation	0.5	megohm

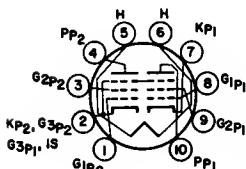


7AG

socket. Heater: volts (ac/dc), 6.3; amperes, 0.15. Maximum ratings in indicator service: fluorescent-target volts, 250 max, 125 min; ray-control-electrode supply volts, 250 max; peak heater-cathode volts, 90 max. Typical operation: fluorescent-target volts, 250; fluorescent-target mA, 3.75; ray-contact-electrode volts (approx. for 0° shadow angle), 155; ray-control-electrode volts (approx. for 100° shadow angle), 0.

ELECTRON-RAY TUBE

6AF6G



10L

DUAL PENTODE

6AF9

Miniature type used in television receiver applications. Unit No.1 is used as a video output pentode, and unit No.2 as a sound if amplifier, age amplifier, or sync separator. Outlines section, 6L, except has 10-pin base; requires miniature 10-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.85	ampere
Peak Heater-Cathode Voltage	± 200 max	volts