

Class A₁ Amplifier

CHARACTERISTICS

	Unit No.1	Unit No.2	
Plate Voltage	250	60 150	volts
Grid Voltage	-3	0 -17.5	volts
Amplification Factor	64	— 6	
Plate Resistance (Approx.)	40000	— 800	ohms
Transconductance	1600	— 7500	μ mhos
Plate Current	1.5	95* 40	mA
Grid Voltage (Approx.):			
For plate current of 10 μ A	-5.5	—	volts
For plate current of 100 μ A	—	— -40	volts
Transconductance, For plate current of 1 mA	—	— 500	μ mhos
Plate Current, For grid voltage of -25 volts	—	— 6	mA

* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

Vertical-Deflection Oscillator and Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)

	Unit No.1 Oscillator	Unit No.2 Amplifier	
DC Plate Voltage	330	330	volts
Peak Positive-Pulse Plate Voltage#	—	1500	volts
Peak Negative-Pulse Grid Voltage	400	250	volts
Peak Cathode Current	70	175	mA
Average Cathode Current	20	50	mA
Plate Dissipation	1.5	10	watts

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:			
For grid-resistor-bias or cathode-bias operation	2.2	2.2	megohms
# Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).			

6FE5

Refer to chart at end of section.

6FG6/EM84

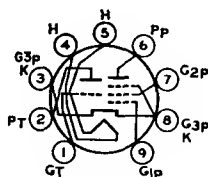
Refer to chart at end of section.

6FG7

5FG7

MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE

Miniature type used as combined oscillator and mixer tube in vhf color and black-and-white television receivers. Outlines section, 6B; requires miniature 9-contact socket. Type 5FG7 is identical with type 6FG7 except for heater ratings.



9GF

	5FG7	6FG7	
Heater Voltage (ac/dc)	4.7	6.3	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	11	seconds
Heater-Cathode Voltage:			
Peak value	± 200 max	± 200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Triode Unit:			
Grid to Plate	1.8	1.8	pF
Grid to Cathode, Pentode Grid No.3, and Heater Plate to Cathode, Pentode Grid No.3, and Heater	3	3	pF
Pentode Unit:			
Grid No.1 to Plate	0.02 max	0.01 max	pF
Grid No.1 to Cathode, Grid No.3, Grid No.2, and Heater	5	5	pF
Plate to Cathode, Grid No.3, Grid No.2, and Heater	2.4	3.4	pF
Heater to Cathode, and Pentode Grid No.3	6	6*	pF

* With external shield connected to cathode except as noted.

* With external shield connected to ground.

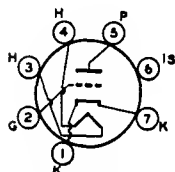
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MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	3	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	See curve page 300	
For grid-No.2 voltages between 165 and 330 volts	—	0.55	watt

CHARACTERISTICS

	Triode Unit	Pentode Unit	
Plate Voltage	125	100 125	volts
Grid-No.2 Voltage	—	100 125	volts
Grid-No.1 Voltage	—1	0 —1	volts
Amplification Factor	43	—	
Plate Resistance (Approx.)	5700	— 18000	ohms
Transconductance	7500	7400 6000	μ mhos
Plate Current	13	— 11	mA
Grid-No.2 Current	—	— 4	mA
Grid-No.1 Voltage (Approx.) for plate current of 30 μ A	—6.5	— —7.5	volts



7FP

HIGH-MU TRIODE

Miniature type used as an rf amplifier in vhf tuners of color and black-and-white television receivers. Outlines section, 5C; requires 7-contact socket. Type 2FH5 is identical to type 6FH5 except for heater ratings.

6FH5

2FH5

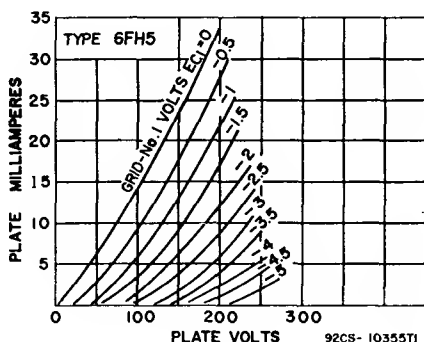
	2FH5	6FH5	
Heater Voltage (ac/dc)	2.35	6.3	volts
Heater Current	0.6	0.2	ampere
Heater Warm-up Time (Average)	11	—	seconds
Peak Heater-Cathode Voltage	± 100 max	± 100 max	volts
Direct Interelectrode Capacitances (Approx.):	Unshielded	Shielded*	
Grid to Plate	0.52	0.52	pF
Grid to Cathode, Heater, and Internal Shield	3.2	3.2	pF
Plate to Cathode, Heater, and Internal Shield	3.2	4	pF

* With external shield connected to Pin 1.

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MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	150	volts
Grid Voltage, Positive-bias value	0	volts
Cathode Current	22	mA
Plate Dissipation	2.2	watts



92CS-10355T1