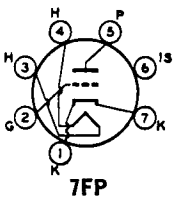
Class A_1 Amplifier

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	—	180000	ohms
Transconductance	7500	7400	6000	μmhos
Plate Current	13	—	11	mA
Grid-No.2 Current	—	—	4	mA
Grid-No.1 Voltage (Approx.) for plate current of 30 μA	—6.5	—	—7.5	volts



7FP

6FH5

2FH5

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.

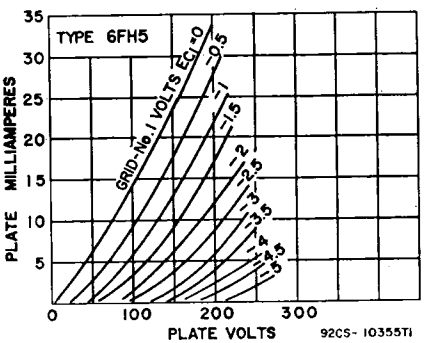
	2FH5	6FH5	
Heater Voltage (ac/dc)	2.35	6.3	volts
Heater Current	0.6	0.2	ampere
Heater Warm-up Time (Average)	11	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	volts

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.

Class A_1 Amplifier

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



CHARACTERISTICS

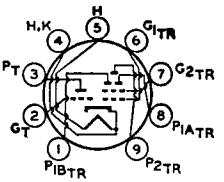
Plate Voltage	135	volts
Grid Voltage	—1	volts
Plate Resistance (Approx.)	5600	ohms
Transconductance	9000	μmhos
Amplification Factor	50	
Plate Current	11	mA
Grid Voltage (Approx.) for plate current of 100 μA	—5.5	volts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance, for cathode-bias operation	1	megohm

6FH8

MEDIUM-MU TRIODE—THREE-PLATE TETRODE



9KP

Miniature type used in complex-wave generator applications and in television receiver applications. Sharp-cutoff tetrode unit has pair of additional plates. Outlines section, 6B; requires 9-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.45	ampere
Direct Interelectrode Capacitances:°		
Triode Unit:		
Grid to Plate	1.4	pF
Grid to Cathode and Heater	2.6	pF
Plate to Cathode and Heater	1	pF
Tetrode Unit:		
Grid No.1 to Plate No.2	0.06 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Plate No.1A, and Plate No.1B	4.5	pF
Plate No.2 to Cathode, Heater, Grid No.2, Plate No.1A, and Plate No.1B	1.4	
Tetrode Grid No.1 to Triode Plate	0.35 max	pF
Tetrode Plate No.2 to Triode Plate	0.008 max	pF

° With external shield connected to cathode.

Class A_1 Amplifier

CHARACTERISTICS — **Triode Unit**

Plate Voltage	100	volts
Grid Voltage	—1	volt
Amplification Factor	40	
Plate Resistance (Approx.)	7400	ohms
Transconductance	5400	μmhos
Plate Current	7.9	mA
Grid Voltage (Approx.) for plate current of 100 μA	—7	volts

Tetrode Unit with Plates No.1A and No.1B Connected to Cathode at Socket

MAXIMUM RATINGS (Design-Maximum Values)

Plate-No.2 Voltage	250	volts
Grid-No.2 Voltage	250	volts
Grid-No.1 Voltage	—2	volts
Plate-No.2 Resistance (Approx.)	0.75	megohm
Transconductance, Grid No.1 to Plate No.2	4400	μmhos
Plate-No.2 Current	7.3	mA
Grid-No.2 Current	1.4	mA
Grid-No.1 Voltage (Approx.) for plate-No.2 current of 100 μA	—7	volts

Complex-Wave Generator

MAXIMUM RATINGS (Design-Maximum Values)	Triode Unit	Tetrode Unit	
Plate Voltage	275	—	volts
Plate-No.1A Voltage	—	200	volts
Plate-No.1B Voltage	—	200	volts
Plate-No.2 Voltage		275	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	275	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage:			
Negative-bias value	—40	—40	volts
Positive-bias value	0	0	volts
Plate Dissipation	1.7	—	watts
Plate-No.1A Dissipation	—	0.3	watt
Plate-No.1B Dissipation	—	0.3	watt
Plate-No.2 Dissipation	—	2.3	watts