

6GJ7

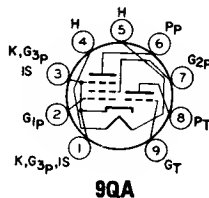
Refer to chart at end of section.

6GJ7/
ECF801

5GJ7, 8GJ7/PCF801

MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE

Miniature types used as combined oscillator and mixer tubes in color and black-and-white television receivers utilizing an intermediate frequency in the order of 40 MHZ. Outlines section, 6J; requires miniature 9-contact socket. Types 5GJ7 and 8GJ7/PCF801 are identical with type 6GJ7/ECF801 except for heater ratings.



	5GJ7	6GJ7/ECF801	8GJ7/PCF801	
Heater Voltage (ac/dc)	5.6	6.3	8	volts
Heater Current	0.45	0.41	0.3	ampere
Peak Heater-Cathode Voltage ^a	±110 max	±110 max	±110 max	volts

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate-Supply Voltage	600	600	volts
DC Plate Voltage	140	275	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	600	volts
DC Grid-No.2 Voltage	—	275	volts
DC Grid-No.1 (Control-Grid) Voltage	—	—50	volts
Cathode Current	22	20	mA
Plate Dissipation	1.8	2.4	watts
Grid-No.2 Input ^b	—	0.55	watt

CHARACTERISTICS

DC Plate Voltage	100	170	volts
DC Grid-No.2 Voltage	—	120	volts
DC Grid-No.1 Voltage	—3	—1.2	volts
Amplification Factor	20	55*	
Plate Resistance (Approx.)	—	0.35	megohm
Transconductance	9000	11000	μmhos
Plate Current	15	10	mA
Grid-No.2 Current	—	3	mA
Grid-No.1 Voltage for grid-No.1 current of 0.3 μA	—1.3 max	—1.3 max	volts
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5	1	megohm
For cathode-bias operation	0.5	2.2	megohms

^a The hum should be minimized in intercarrier applications by limiting the heater-cathode voltage to 100 volts rms, and in AM receivers to 50 volts rms.

* Grid No.2 to grid No.1, approximate value.

^b When control-grid bias is between —1.5 and —2 volts, screen-grid dissipation is limited to 0.50 watt. When this bias is greater than —2 volts, maximum screen-grid dissipation is 0.36 watt.

6GJ8

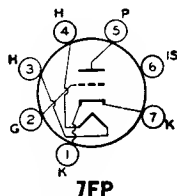
Refer to chart at end of section.

6GK5

HIGH-MU TRIODE

2GK5, 3GK5, 4GK5

Miniature type with frame grid used as grounded-cathode rf-amplifier tube in vhf tuners of color and black-and-white television receivers. Outlines section, 5C; requires miniature 7-contact socket. Types 2GK5, 3GK5, and 4GK5 are identical with type 6GK5 except for heater ratings.



	2GK5	3GK5	4GK5	6GK5	
Heater Voltage (ac/dc)	2.3	2.8	4	6.3	volts
Heater Current	0.6	0.45	0.3	0.18	ampere
Heater Warm-up Time (Average)	11	11	11	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	±100 max	±100 max	volts
Direct Inter-electrode Capacitances (Approx.):°					
Grid to Plate				0.52	pF
Grid to Cathode, Heater, and Internal Shield				5	pF
Plate to Cathode, Heater, and Internal Shield				3.5	pF
Heater to Cathode				2.5*	pF

- * With external shield connected to cathode, except as noted.
- With external shield and internal shield connected to ground.

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	200	volts
Grid Voltage:		
Negative-bias value	50	volts
Positive-bias value	0	volts
Average Cathode Current	22	mA
Plate Dissipation	2.5	watts

CHARACTERISTICS

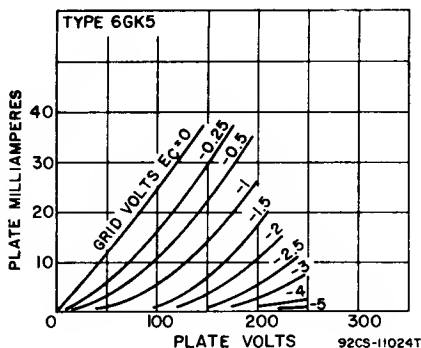
Plate Voltage	135	volts
Grid Voltage	-1	volts
Amplification Factor	78	
Plate Resistance (Approx.)	5400	ohms
Transconductance	15000	μ mhos
Plate Current	11.5	mA
Input Resistance*	275	ohms
Input Capacitance*	11.2	pF
Noise Figure†	4.7	dB
Grid Voltage (Approx.) for transconductance of 150 μ mhos	-4.2	volts
Grid Voltage (Approx.) for transconductance of 1500 μ mhos	-2.5	volts

MAXIMUM CIRCUIT VALUE

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

* Measured at 200 MHz with heater volts = 6.3 and plate effectively grounded for rf voltages.

† For a neutralized triode amplifier at a frequency of 200 MHz with signal source impedance adjusted for minimum noise output.

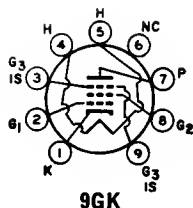


POWER PENTODE

6GK6

10GK6, 16GK6

Miniature type used in the output stage of audio amplifying equipment and also in the video output stage of color and black-and-white television receivers. Outlines section, 6G; requires miniature 9-contact socket. Types 10GK6 and 16GK6 are identical with type 6GK6 except for heater ratings.



	6GK6	10GK6	16GK6	
Heater Voltage (ac/dc)	6.3	10.6	16	volts
Heater Current	0.76	0.45	0.3	ampere
Heater Warm-up Time (Average)	—	11	11	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	±100 max	volts
Direct Interelectrode Capacitances:				
Grid No.1 to Plate			0.14 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			10	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			7	pF