

	6CS7	8CS7	
Heater Voltage (ac/dc)	6.3	8.4	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 (Approx.):	Unit No.1	Unit No.2	
Grid to Plate	2.6	2.6	pF
Grid to Cathode and Heater	1.8	3	pF
Plate to Cathode and Heater	0.5	0.5	pF

Class A₁ Amplifier

CHARACTERISTICS

	Unit No.1 Oscillator	Unit No.2 Amplifier	
Plate Voltage	250	250	volts
Grid Voltage	-8.5	-10.5	volts
Amplification Factor	17	15.5	
Plate Resistance (Approx.)	7700	3450	ohms
Transconductance	2200	4500	μmhos
Plate Current	10.5	19	mA
Plate Current for grid voltage of -16 volts	—	3	mA
Grid Voltage (Approx.) for plate current of 10 μA	-24	—	volts
Grid Voltage (Approx.) for plate current of 50 μA	—	-22	volts

Vertical-Deflection Oscillator and Amplifier

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

MAXIMUM RATINGS (Design-Center Values)

	Unit No.1 Oscillator	Unit No.2 Amplifier	
DC Plate Voltage	500	500	volts
Peak Positive-Pulse Plate Voltage [#] (Absolute Maximum)	—	2200 ^Δ	volts
Peak Negative-Pulse Grid Voltage	400	250	volts
Peak Cathode Current	70	105	mA
Average Cathode Current	20	30	mA
Plate Dissipation	1.25	5.5	watts

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance	2.2	2.2	megohms
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[#] Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

^Δ Under no circumstances should this absolute value be exceeded.

6CT3

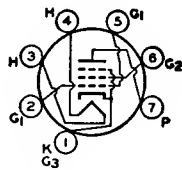
Refer to chart at end of section.

6CU5

12CU5/12C5,
17CU5/17C5

Miniature type used in the audio output stage of television receivers. Outlines section, 5D; requires miniature 7-contact socket. Types 12CU5/12C5, and 17CU5/17C5 are identical with type 6CU5 except for heater ratings.

BEAM POWER TUBE



7CV

	6CU5	12CU5/12C5	17CU5/ 17C5	
Heater Voltage (ac/dc)	6.3	12.6	16.8	volts
Heater Current	1.2	0.6	0.45	ampere
Heater Warm-up Time (Average)	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):				
Grid No.1 to Plate			0.6	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3			13	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3			8.5	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	150	volts
Grid-No.2 (Screen-Grid) Voltage	130	volts
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	volts
Plate Dissipation	7	watts
Grid-No.2 Input	1.4	watts
Bulb Temperature (At hottest point)	220	°C

TYPICAL OPERATION

Plate Voltage	120	volts
Grid-No.2 Voltage	110	volts
Grid-No.1 Voltage	-8	volts
Peak AF Grid-No.1 Voltage	8	volts
Zero-Signal Plate Current	49	mA
Maximum-Signal Plate Current	50	mA
Zero-Signal Grid-No.2 Current	4	mA
Maximum-Signal Grid-No.2 Current	8.5	mA
Plate Resistance (Approx.)	10000	ohms
Transconductance	7500	μmhos
Load Resistance	2500	ohms
Total Harmonic Distortion	10	per cent
Maximum-Signal Power Output	2.3	watts

MAXIMUM CIRCUIT VALUES

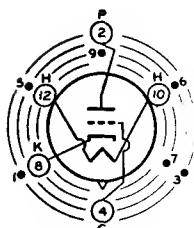
Grid-No.1-Circuit Resistance:		
For fixed-bias operation	0.1	megohm
For cathode-bias operation	0.5	megohm

For replacement use type 6BQ6GTB/6CU6.

6CU6

Refer to chart at end of section.

6CU8



INDEX= LARGE LUG
● = PIN CUT OFF
12AQ

HIGH-MU TRIODE

6CW4

2CW4, 13CW4

Nuvistor type used as a grounded-cathode, neutralized rf amplifier in vhf tuners of color and black-and-white television and FM receivers. Outlines section, 1; requires nuvistor socket. Types 2CW4 and 13CW4 are identical with type 6CW4 except for heater ratings.

	2CW4	6CW4	13CW4	
Heater Voltage (ac/dc)	2.1	6.3	13.5	volts
Heater Current	0.45	0.135	0.06	ampere
Heater Warm-up Time (Average)	8	—	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	±100 max	volts
Direct Interelectrode Capacitances (Approx.)				
Grid to Plate		0.92		pF
Grid to Cathode, Heater, and Shell		4.3		pF
Plate to Cathode, Heater, and Shell		1.8		pF
Plate to Cathode		0.18		pF
Heater to Cathode		1.6		pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Supply Voltage	300°	volts
Plate Voltage	135	volts
Grid Voltage:		
Negative-bias value	55	volts
Peak positive value	0	volts
Cathode Current	15	mA
Plate Dissipation	1.5	watt