

6CU5**12C5/12CU5,
17C5/17CU5, 25C5, 50C5**

Color Television Type

AUDIO POWER AMPLIFIER**Beam Pentode**

Construction Miniature T-5½
 Base Button 7 Pin, E7-1
 Basing 7CV
 Outline 5-3
 Maximum Diameter 0.750 In.
 Maximum Seated Height 2.375 In.
 Maximum Overall Height 2.625 In.

**ELECTRICAL DATA
HEATER OPERATION**

	50C5	25C5	17C5/17CU5	12C5/12CU5
Heater Voltage.....	50	25	16.8	12.6
Heater Current	150	300	450	600
Heater Warm-up Time ..	—	—	11	11

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode

Total DC and Peak.....

Heater Positive with Respect to Cathode

DC.....

Total DC and Peak.....

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate

Input

Output

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)

Grid No. 2 Voltage (Max.)

Plate Dissipation (Max.)

Grid No. 2 Dissipation (Max.)

Positive Grid No. 1 Voltage (Max.)

Grid No. 1 Circuit Resistance

Fixed Bias (Max.)

Cathode Bias (Max.)

Bulb Temperature (Hottest Point) (Max.).....

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

Plate Voltage

Grid No. 2 Voltage

Grid No. 1 Voltage

Peak AF Grid No. 1 Voltage

Zero-Signal Plate Current.....

Maximum-Signal Plate Current

Zero-Signal Grid No. 2 Current.....

Maximum-Signal Grid No. 2 Current

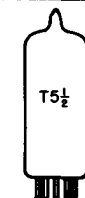
Transconductance

Plate Resistance (Approx.)

Load Resistance

Maximum-Signal Power Output.....

Total Harmonic Distortion (Approx.).....



6CU5
 6.3 Volts
 1200 Ma
 — Seconds

200 Volts

100 Volts

200 Volts

0.6 Pf

13 Pf

8.5 Pf

150 Volts

130 Volts

7.0 Watts

1.4 Watts

0 Volt

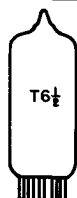
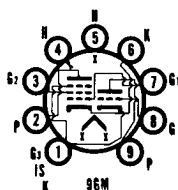
0.1 Megohm

0.5 Megohm

220 °C

6CU8**Medium Mu Triode
and Sharp Cutoff Pentode**

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9GM
 Outline 6-2
 Maximum Diameter 0.875 In.
 Maximum Seated Height 1.937 In.
 Maximum Overall Height 2.187 In.

**IF/VIDEO/AGC AMP. (T)
OSC./SYNC SEP. or CLIPPER (P)**

120 Volts
 110 Volts
 -8 Volts
 8 Volts
 49 Ma
 50 Ma
 4.0 Ma
 8.5 Ma
 7500 μmhos
 10,000 Ohms
 2500 Ohms
 2.3 Watts
 10 Percent

**ELECTRICAL DATA
HEATER OPERATION**

Heater Voltage.....	6.3 Volts
Heater Current	450 Ma
Heater Warm-up Time	11 Seconds
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**Triode Section**

Grid to Plate	1.6 Pf
Grid to (k + h + g ₃ + IS).....	1.9 Pf
Plate to (k + h + g ₃ + IS).....	1.6 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.025 Pf
Grid No. 1 to (k and g ₃ + g ₂ + h + Tk + IS)	7.0 Pf
Plate to (k and g ₃ + g ₂ + h + Tk + IS)	2.4 Pf

Coupling

Pentode Grid No. 1 to Triode Plate (Max.)	0.03 Pf
Pentode Plate to Triode Plate (Max.)	0.07 Pf

RATINGS (Design Center Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	2.8	2.3 Watts
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Grid No. 2 Input:		
For Grid No. 2 Voltages Up to 150 Volts (Max.)	—	0.55 Watt
For Grid No. 2 Voltages Between 150 Volts and 300 Volts.....	See Rating Chart (Gen. Info. Sec.)	
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Self Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	125	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid Voltage	-1.0	— Volt
Cathode Bias Resistor	—	56 Ohms
Plate Current	17	12 Ma
Grid No. 2 Current	—	3.8 Ma
Transconductance	5800	7800 μ mhos
Amplification Factor	24	—
Plate Resistance.....	4100	170,000 Ohms
Ec1 for Ib = 10 μ a (Approx.).....	-12	-6 Volts
Ib at Ec1 = -3 Volts, RK = 0	—	1.6 Ma

Color Television Type

VHF AMPLIFIER**6CW4**

2CW4, 13CW4

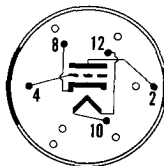
High Mu Triode

Construction Nuvistor, Metal
 Base Medium Ceramic Wafer
 Twelve 5 Pin, E5-65
 Basing 12AQ
 Outline

Maximum Diameter 0.440 In.
 Maximum Seated Height 0.625 In.
 Maximum Overall Height 0.800 In.

**ELECTRICAL DATA
HEATER OPERATION**

	13CW4	2CW4	6CW4
Heater Voltage.....	13.5	2.0	6.3 Volts
Heater Current	60	450	130 Ma



12AQ

