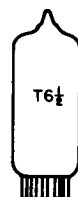
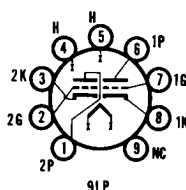


6GU7**8GU7**

Color Television Type

**VERTICAL/HORIZONTAL OSC.
or CHROMA AMPLIFIER****Medium Mu Twin Triode**

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9LP
 Outline 6-3
 Maximum Diameter 0.875 In.
 Maximum Seated Height 2.375 In.
 Maximum Overall Height 2.625 In.

**ELECTRICAL DATA
HEATER OPERATION**

	8GU7	6GU7
Heater Voltage.....	8.4	6.3 Volts
Heater Current	450	600 Ma
Heater Warm-up Time	11	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)

	Section No. 1	Section No. 2
Grid to Plate	3.0	3.0 Pf
Input: g to (h + k)	3.4	3.6 Pf
Output: p to (h + k)	0.44	0.34 Pf
Plate of Section No. 1 to Plate of Section No. 2	1.0	Pf

RATINGS (Design Maximum Rating System)

DC Plate Voltage (Max.) ⁽¹⁾	330 Volts
Positive Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.) ⁽²⁾	3 Watts
Grid Circuit Resistance	
Fixed Bias (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

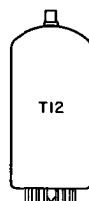
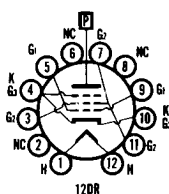
Plate Voltage	250 Volts
Grid No. 1 Voltage	-10.5 Volts
Plate Current	11.5 Ma
Transconductance	3100 μ mhos
Amplification Factor	17
Plate Resistance (Approx.)	5500 Ohms
Grid Voltage for $i_b = 50 \mu$ a (Approx.)	-23 Volts
Plate Current at $E_c = -14$ Vdc.	4 Ma

NOTES:

- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (2) In stages operating with grid leak bias, an adequate bias resistor or other suitable means is required to protect the tube in the absence of excitation.

6GV5**17GV5****HORIZONTAL DEFLECTION
AMPLIFIER****Beam Power Pentode**

Construction Compactron T-12
 Base Button 12 Pin, E12-74
 Top Cap C1-3
 Basing 12DR
 Outline 12-79
 Maximum Diameter 1.563 In.
 Maximum Seated Height 3.250 In.
 Maximum Overall Height 3.625 In.



ELECTRICAL DATA
HEATER OPERATION

	17GV5	6GV5
Heater Voltage.....	16.8	6.3 Volts
Heater Current	450	1200 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)

Grid No. 1 to Plate	0.6 Pf
Input	16 Pf
Output	7 Pf

RATINGS (Design Maximum Rating System)
Horizontal Deflection Amplifier⁽¹⁾

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.)	770 Volts
Peak Positive Pulse Plate Voltage	6500 Volts
Peak Negative Pulse Plate Voltage	1500 Volts
Plate Dissipation (Max.) ⁽²⁾	17.5 Watts
Peak Negative Grid No. 1 Voltage (Max.)	330 Volts
Grid No. 2 Voltage (Max.)	220 Volts
Grid No. 2 Dissipation (Max.)	3.5 Watts
Average Cathode Current (Max.).....	175 Ma
Peak Cathode Current (Max.)	550 Ma
Grid No. 1 Circuit Resistance (Max.)	1.0 Megohm
Bulb Temperature (At Hottest Point) (Max.)	220 °C

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	5000	250 Volts
Grid No. 2 Voltage	150	150 Volts
Grid No. 1 Voltage	—	-22.5 Volts
Plate Current	—	65 Ma
Grid No. 2 Current	—	1.8 Ma
Transconductance	—	7300 μ mhos
Plate Resistance.....	—	18,000 Ohms
Amplification Factor ⁽³⁾	—	4.4
Ec1 for Ib = 1.0 Ma (Approx.)	-100	-42 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 60 V; Ec2 = 150 V and Ec1 = 0
Ib = 345 Ma, and Ic2 = 27 Ma

NOTES:

- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (2) In stages operating with grid leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (3) Amplification factor with tube operating as a triode with 150 volts on the plate and Grid No. 2 and -22.5 volts on Grid No. 1.

VERTICAL DEFLECTION
AMPLIFIER

6GV8
9GV8, 18GV8

Triode and Pentode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9LY
Outline
 Maximum Diameter 0.875 In.
 Maximum Seated Height 2.812 In.
 Maximum Overall Height 3.062 In.

