

Peak Power Output (Max.)	2.5	— Watts
Grid Circuit Resistance		
Self Bias (Max.)	2.2	2.2 Megohms
Fixed Bias (Max.)	—	1.0 Megohm
Bulb Temperature	—	210 °C

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section
Plate Voltage	250	135 Volts
Grid No. 2 Voltage	—	120 Volts
Grid No. 1 Voltage	-4	-10 Volts
Plate Current	2.3	56 Ma
Grid No. 2 Current	—	3 Ma
Transconductance	3600	9300 μ mhos
Amplification Factor	58	6.5 ^(a)
Plate Resistance (Approx.)	16,000	12,000 Ohms
Ec for Ib = 10 μ a	-6.6	— Volts
Ec for Ib = 1 Ma (Approx.)	—	-26 Volts
Ec for Ib = 100 μ a	—	-30 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 45 V; Ec2 = 125 V; and Ec = 0 V

Ib = 200 Ma, and Ic2 = 20 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) Measured with Eb = 120 V, Ec2 = 120 V and Ec1 = -10 V.

6LT8

8LT8, 11LT8

**HORIZONTAL OSCILLATOR
and AFC****Double Diode and Pentode**

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

ELECTRICAL DATA**HEATER OPERATION**

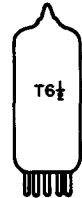
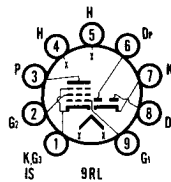
	11LT8	8LT8	6LT8
Heater Voltage	11.4	8.1	6.3 Volts
Heater Current	315	450	600 Ma
Heater Warm-up Time	11	11	11 Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak			200 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak			200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Pentode Section	
Grid No. 1 to Plate	0.065 Pf
Input: Pg1 to (h + Pk + Pg2 + Pg3 + IS)	11 Pf
Output: Pp to (h + Pk + Pg2 + Pg3 + IS)	3.6 Pf
Diode Sections	
Plate (Section 1) to Cathode	1.4 Pf
Plate (Section 2) to Cathode	1.4 Pf
Plate to Plate	1.4 Pf

RATINGS (Design Maximum Rating System)

Pentode Section	
Plate Voltage	330 Volts
Screen Supply Voltage	330 Volts
Screen Voltage	See Rating Chart (See Info. Sec.)
Positive DC Grid No. 1 Voltage	0 Volt
Plate Dissipation	3.1 Watts
Screen Dissipation	0.65 Watts
Grid No. 1 Circuit Resistance (Cathode Bias)	1.0 Megohm



Diode Section

Diode Current for Continuous Operation (Each Diode)..... 5.0 Ma

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage	125 Volts
Screen Voltage	125 Volts
Cathode-Bias Resistor	56 Ohms
Plate Resistance (Approx.)	200,000 Ohms
Transconductance	13,000 μ mhos
Plate Current	10 Ma
Screen Current	3.4 Ma
Grid No. 1 Voltage (Approx.) $I_b = 20 \mu$ a	-3.5 Volts

Diode Section

Average Diode Current Each Diode with 5 Volts DC Applied 20 Ma

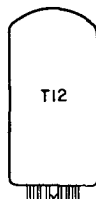
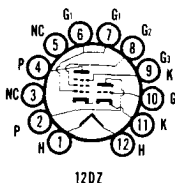
Color Television Type

**VERTICAL DEFLECTION
OSCILLATOR and AMPLIFIER****6LU8**

16LU8, 21LU8

**High Mu Triode and
Beam Power Pentode**

Construction Compactron T-12
 Base Button 12 Pin, E12-74
 Basing 12DZ
 Outline 12-57
 Maximum Diameter 1.562 In.
 Maximum Seated Height 2.750 In.
 Maximum Overall Height 3.125 In.

**ELECTRICAL DATA****HEATER OPERATION**

	21LU8	16LU8	6LU8
Heater Voltage.....	21	15.8	6.3 Volts
Heater Current	450	600	1500 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)**Triode Section**

Grid to Plate: t_g to t_p	6.0 Pf
Input: t_g to ($h + T_k$)	7.0 Pf
Output: t_p to ($h + T_k$)	2.0 Pf

Pentode Section

Grid No. 1 to Plate: pg_1 to pp	0.5 Pf
Input: pg_1 to ($h + Pk + Pg_2$)	16 Pf
Output: pp to ($h + Pk + Pg_2$)	9.0 Pf

Coupling

Pentode Grid No. 1 to Triode Plate (Max.)	0.13 Pf
Pentode Plate to Triode Plate (Max.)	0.40 Pf

RATINGS (Design Maximum Rating System)**Vertical Deflection Oscillator and Amplifier⁽¹⁾**

	Triode Osc.	Pentode Amp.
Plate Voltage (Max.)	400	400 Volts
Grid No. 2 Voltage (Max.)	—	300 Volts
Peak Positive Pulse Plate Voltage (Max.)	—	2500 Volts
Peak Negative Grid No. 1 Voltage (Max.)	400	250 Volts
Plate Dissipation (Max.) ⁽²⁾	2.5	14 Watts
Grid No. 2 Dissipation (Max.)	—	2.75 Watts
Average Cathode Current (Max.)	30	75 Ma
Peak Cathode Current (Max.)	105	260 Ma
Grid Circuit Resistance		
Self Bias (Max.)	2.2	2.2 Megohms
Fixed Bias (Max.)	—	1.0 Megohm
Bulb Temperature (Max.)	—	210 °C