

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

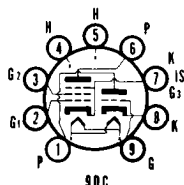
NOTES:

- (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 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.

6LX8/LCF802**HORIZONTAL OSCILLATOR (P)
REACTANCE TUBE (T)**

Triode and Pentode

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



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.0 Volts
Heater Current	450 Ma
Heater Warm-up Time	11 Seconds
Maximum Heater-Cathode Voltage	100 Volts

DIRECT INTERELECTRODE CAPACITANCES

Pentode Section

Grid No. 1	5.4 Pf
Plate to Grid No. 1	0.060 Pf
Grid No. 1 to Filament	0.1 Pf

Triode Section

Grid	2.4 Pf
Plate to Grid	1.5 Pf
Grid to Filament	0.1 Pf

RATINGS (Design Center Rating System)

Pentode Section

Plate Voltage, Zero Plate Current (Max.)	550 Volts
Plate Voltage (Max.)	250 Volts
Plate Dissipation (Max.)	1.2 Watts
Grid No. 2 Voltage, Zero Plate Current (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	250 Volts
Grid No. 2 Dissipation (Max.)	0.8 Watt
Grid No. 1 Circuit Resistance (Fixed Bias) (Max.)	0.56 Megohm
Grid No. 1 Circuit Resistance (Self Bias) (Max.)	1.0 Megohm
Cathode Current (Max.)	15 Ma
Peak Cathode Current (Max.) ⁽¹⁾	50 Ma
Input Impedance at 60 Hertz (Max.)	300 K Ohms

Triode Section

Plate Voltage, Zero Plate Current (Max.)	550 Volts
Plate Voltage (Max.)	250 Volts
Plate Dissipation (Max.)	1.4 Watts

Grid No. 1 Circuit Resistance (Max.)	3 Megohms
Cathode Current (Max.)	10 Ma
Input Impedance at 60 Hertz (Max.)	50 K Ohms

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage	100 Volts
Grid No. 2 Voltage	100 Volts
Grid No. 1 Voltage	-1 Volt
Plate Current	6 Ma
Grid No. 2 Current	1.7 Ma
Transconductance	5500 μ mhos
Input Resistance	0.4 Megohm
Amplification Factor (Grid No. 1 to Grid No. 2)	47
Plate Current ($E_{g1} = 0$ V)	12.5 Ma
Grid No. 2 Current ($E_{g1} = 0$ V)	3.5 Ma
Grid No. 1 Voltage ($E_b = E_{g2} = 200$ V, $I_b = 10$ μ a)	-16 Volts
Grid No. 1 Voltage ($I_{c1} = +0.3$ μ a)	-1.3 Volts

Triode Section

Plate Voltage	200 Volts
Grid Voltage	-2 Volts
Plate Current	3.5 Ma
Transconductance	3500 μ mhos
Input Resistance	20 K Ohms
Amplification Factor	70
Plate Current ($I_c = 10$ μ a)	10 Ma
Grid Voltage ($I_c = +0.3$ μ a)	-1.3 Volts

NOTE:

(1) Duty cycle 30% maximum; pulse time 30 μ sec. maximum.

Color Television Type

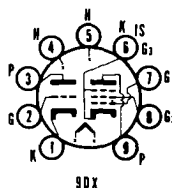
VIDEO AMPLIFIER (P) GENERAL PURPOSE AMPLIFIER (T)

6LY8

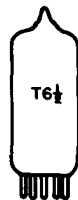
10LY8

High Mu Triode and Sharp Cutoff Pentode

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



SDX

**ELECTRICAL DATA
HEATER OPERATION**

	10LY8	6LY8
Heater Voltage	10.5	6.3 Volts
Heater Current	450	750 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)**Pentode Section**

Grid No. 1 to Plate	0.075 Pf
Input: P_{g1} to ($h + P_k + P_{g2} + P_{g3} + IS$)	13 Pf
Output: P_p to ($h + P_k + P_{g2} + P_{g3} + IS$)	4.4 Pf

Triode Section

Grid to Plate	3.8 Pf
Input: T_g to ($h + T_k + P_k + P_{g3} + IS$)	2.6 Pf
Output: T_p to ($h + T_k + P_k + P_{g3} + IS$)	2.8 Pf

RATINGS (Design Maximum Rating System)

	Pentode Section	Triode Section
Plate Voltage (Max.)	330	330 Volts
Screen Supply Voltage (Max.)	330	— Volts
Screen Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive DC Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	5.0	1.0 Watts
Screen Dissipation (Max.)	1.1	— Watts