

CHARACTERISTICS AND TYPICAL OPERATION

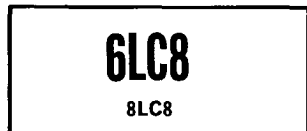
Unregulated DC Supply Voltage	36,000 Volts
Equivalent Resistance of Unregulated Supply	11 Megohms
DC Reference Voltage	200 Volts
Equivalent Resistance of Reference Supply	1000 Ohms
Effective Grid-Plate Transconductance	200 μ mhos
DC Plate Current for Zero Load Current	1000 μ a
DC Plate Current for Load Current of 1 Ma	45 μ a
Regulated DC Output Voltage at Zero Load Current	25,000 Volts
Regulated DC Output Voltage at Load Current of 1 Ma	24,500 Volts

NOTES:

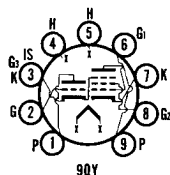
- (1) Shield connected directly to ground to minimize the effects of a momentary arc within the tube.
- (2) Peak value for duration of 20 seconds maximum during equipment warm-up.
- (3) Sufficient impedance (1000 ohms is suggested) should be in series with the cathode to limit the cathode current under prolonged heater-cathode short-circuit conditions to 450 Ma. This protective impedance will minimize the danger of heater burnout in case of a momentary heater-cathode arc within the tube.
- (4) With flyback transformer high-voltage supply.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated higher than 16,000 volts.

**High Mu Triode and Sharp Cutoff Pentode**

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

**ELECTRICAL DATA
HEATER OPERATION**

	8LC8	6LC8
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)**Triode Section**

Grid to Plate	2.2 Pf
Input: g to (k + h + 1S + g3)	2.8 Pf
Output: p to (k + h + 1S + g3)	2.2 Pf

Pentode Section

Grid No. 1 to Plate	0.1 Pf
Plate to (g3 + Tk + 1S)	3.4 Pf
Grid No. 1 to (g3 + Tk + 1S)	0.36 Pf
Grid No. 3, Triode Cathode and 1S to (Pp + Pk + g2 + Pg1 + h)	12.5 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	300	300 Volts
Peak Positive Pulse Plate Voltage (Max.) ⁽¹⁾	—	600 Volts
Grid No. 2 Supply Voltage (Max.)	—	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive Grid No. 3 Voltage (Max.)	—	0 Volt
Negative Grid No. 3 Voltage (Max.)	—	100 Volts
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Negative Grid No. 1 Voltage (Max.)	50	50 Volts

Plate Dissipation (Max.)	1.1	2.0 Watts
Grid No. 2 Input (Max.)	—	1.1 Watt
Grid No. 1 Circuit Resistance		
Self Bias (Max.)	1.0	1.0 Megohm
Fixed Bias (Max.)	0.25	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

	Triode Section	Pentode Section
Plate Supply Voltage	200	150 Volts
Grid No. 2 Voltage	—	100 Volts
Grid No. 1 Voltage	-2	0 Volt
Cathode Bias Resistor	—	180 Ohms
Plate Current	4	4 Ma
Grid No. 2 Current	—	2.8 Ma
Amplification Factor	70	—
Plate Resistance (Approx.)	17,500	100,000 Ohms
Transconductance (G1 to P)	4000	4400 μ mhos
Transconductance (G3 to P)	—	600 μ mhos
Ec3 for Ib = 20 μ a (Approx.)	—	-7 Volts
Ec1 for Ib = 10 μ a (Approx.)	-5	— Volts
20 μ a (Approx.)	—	-4 Volts

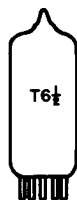
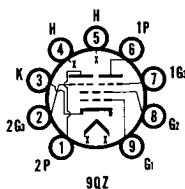
NOTE:

- (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.

Color Television Type

COLOR DEMODULATOR**6LE8****8LE8, 10LE8, 15LE8****Twin Pentode**

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9QZ
 Outline 6-4
 Maximum Diameter 0.875 In.
 Maximum Seated Height 2.812 In.
 Maximum Overall Height 3.062 In.

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

	15LE8	10LE8	8LE8	6LE8
Heater Voltage	15.0	10.0	8.0	6.3 Volts
Heater Current	300	450	600	760 Ma
Heater Warm-up Time	11	11	11	— Seconds

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode

Total DC and Peak

300 Volts

Heater Positive with Respect to Cathode

DC

100 Volts

Total DC and Peak

200 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 3 to Plate (Each Section)	2.7 Pf
Grid No. 1 to All	15.5 Pf
Grid No. 3 to All (Each Section)	6.0 Pf
Plate to All (Each Section)	3.7 Pf
Grid No. 3 (Section 1) to Grid No. 3 (Section 2)	0.1 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Each Section) (Max.)	300 Volts
Grid No. 2 Voltage (Max.)	150 Volts
Plate Dissipation (Each Section) (Max.)	2 Watts
Grid No. 2 Dissipation (Max.)	2 Watts

CHARACTERISTICS AND TYPICAL OPERATION (Each Section)**Grid No. 1 Control**

Plate Voltage	100 Volts
Grid No. 2 Voltage	100 Volts
Grid No. 1 Voltage	-2.5 Volts
Grid No. 3 Voltage	0 Volt
Plate Current (Approx.)	8.0 Ma
Grid No. 2 Current (Approx.)	15.0 Ma
Transconductance (Approx.)	5800 μ mhos