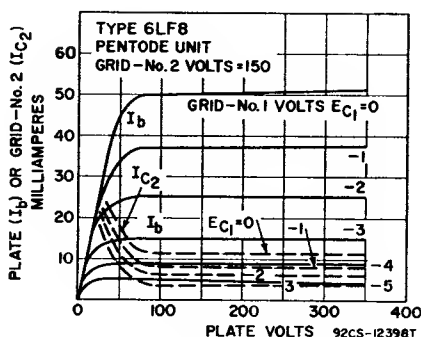
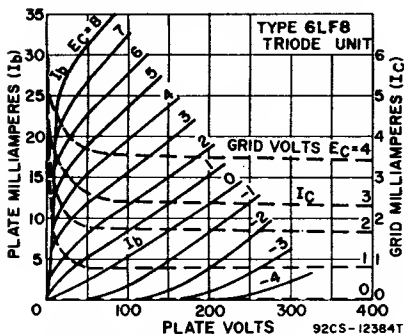


CHARACTERISTICS

Plate Voltage	200	40	75	100	volts
Grid-No.2 Voltage	—	—	150	150	volts
Grid-No.1 Voltage	—2	3	0	—2.5	volts
Amplification Factor	70	40	—	—	
Plate Resistance (Approx.)	17500	10000	200000	—	ohms
Transconductance	4000	4000	11000	—	μmhos
Plate Current	4	11	20	—	mA
Grid-No.2 Current	—	—	12*	5	mA
Grid-No.1 Current	0	2.7	0	0	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	—5	—	—	—8	volts



MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:	
For fixed-bias operation	0.5 megohm
For cathode-bias operation	0.25 megohm

Triode Unit	Pentode Unit	
0.5	0.25	megohm
1	1	megohm

* This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

Refer to chart at end of section.

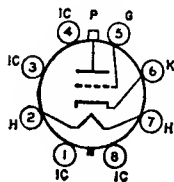
For replacement use type 6LJ6A/6LH6A.

Refer to chart at end of section.

6LH6A

6LJ6

6LJ6A/
6LH6A



8MQ

BEAM TRIODE

Glass octal type used for the shunt regulation of high-voltage, low-current power supplies in color and black-and-white television receivers. Outlines section, 21D; requires octal socket. For high-voltage and X-ray safety considerations, refer to page 93.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.2	ampere
Heater Cathode Voltage	+ not recommended, —450*	volts
Direct Interelectrode Capacitances:		
Grid to Plate	1	pF
Grid to Cathode and Heater	2.6	pF
Plate to Cathode and Heater	1	pF

* Series impedance should be used with the cathode to limit the cathode current under prolonged short-circuit conditions to 450 mA.

Shunt Voltage-Regulator Service

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	27000	volts
Negative Grid Voltage	135	volts
Peak Negative Grid Voltage*	440	volts
Plate Dissipation	40	watts
Average Plate Current	1.5	mA

TYPICAL OPERATION

Unregulated DC Supply Voltage	36000	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 Load Current of 0 mA	1000	μ A
DC Plate Current for Load Current of 1 mA	45	μ A
Regulated DC Output Voltage for Load Current of 0 mA	25000	volts
Regulated DC Output Voltage for Load Current of 1 mA	24500	volts

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance:

For use with "Flyback Transformer" high voltage supply 3 megohms

X-RADIATION CHARACTERISTIC

X-Radiation, Maximum:

Statistical value controlled on a lot sampling basis 0.5 mR/hr

• For interval of 20 seconds maximum during equipment warm-up period.

Caution—Operation of this tube outside of the maximum values indicated above may result in either temporary or permanent changes in the X-radiation characteristic of the tube. Equipment design must be such that these maximum values are not exceeded.

6LJ8

4LJ8, 5LJ8

**MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE**

Miniature type used as a combined oscillator and mixer in vhf television receivers. Outlines section, 6B; requires 9-contact socket. Types 4LJ8 and 5LJ8 are identical with type 6LJ8 except for heater ratings.

Heater Voltage (ac/dc)	4LJ8 4.3	5LJ8 5.6	6LJ8 6.3	volts
Heater Current	0.6	0.45	0.4	ampere
Heater Warm-up Time (Average)	11	11	—	seconds
Heater-Cathode Voltage:				
Peak value	± 200 max	± 200 max	± 200 max	volts
Average value	100 max	100 max	100 max	volts

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Maximum Values)**

	Triode Unit	Pentode Unit	
Plate Voltage	280	280	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	280	volts
Grid-No.2 Voltage	—	See curve page 300	
Cathode Current	20	20	mA
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2	2	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 140 volts	—	0.5	watts
For grid-No.2 voltages between 140 and 280 volts	—	See curve page 300	

CHARACTERISTICS

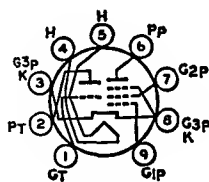
Plate Voltage	125	125	volts
Grid-No.2 Voltage	—	125	volts
Cathode-Bias Resistor	68	33	ohms
Amplification Factor	40	—	
Plate Resistance (Approx.)	5000	125000	ohms
Transconductance	8000	13000	μ mhos
Plate Current	13	12	mA
Grid-No.2 Current	—	3.5	mA
Grid-No.1 Voltage (Approx.) for plate current of 30 μ A	—6.5	—4	volts

MAXIMUM CIRCUIT VALUES

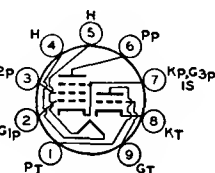
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	1	0.5	megohm
For cathode-bias operation	0.5	0.25	megohm

6LM8**MEDIUM-MU TRIODE—SEMI-
REMOTE-CUTOFF PENTODE**

Miniature type used in color and black-and-white television receiver applications. The pentode unit is used in burst-amplifier circuits, and the triode unit as a general-purpose amplifier tube. Outlines section, 6B; requires miniature 9-contact socket.



9GF



9AE