

Direct Interelectrode Capacitances:

Plate (Each Unit) to All Other Electrodes	3.7	pF
Grid No.1 to All Other Electrodes	15.5	pF
Grid No.3 (Each Unit) to All Other Electrodes	6	pF
Grid No.3 to Plate (Each Unit)	2.7	pF
Grid No.3 (Unit No.1) to Grid No.3 (Unit No.2)	0.1	pF

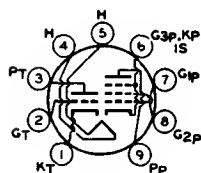
Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage (Each Unit)	300	volts
Grid-No.2 (Screen-Grid) Voltage	150	volts
Plate Dissipation (Each Unit)	2	watts
Grid-No.2 Input	2	watts

CHARACTERISTICS

	G ₁ Control	G ₂ Control	
Plate Voltage	100	100	volts
Grid-No.3 (Suppressor-Grid) Voltage	0	0	volts
Grid-No.2 Voltage	100	100	volts
Grid-No.1 (Control-Grid) Voltage, Negative-bias value	2.5	2.5	volts
Transconductance (Approx.)	5800	350	μmhos
Plate Resistance (Approx.)	50000	50000	ohms
Plate Current	8	7.6	mA
Grid-No.2 Current	15	14.5	mA
Grid-No.1 Voltage for plate current of 20 μA	-7.2	—	volts
Grid-No.1 Voltage for plate current of 100 μA	-6.3	—	volts
Grid-No.3 Voltage for plate current of 20 μA	—	-17.4	volts
Grid-No.3 Voltage for plate current of 100 μA	—	-16.5	volts



9DX

HIGH-MU TRIODE—
SHARP-CUTOFF PENTODE

6LF8

Miniature type used in video-amplifier stages of color and black-and-white television receivers. Outlines section, 6E; requires miniature 9-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.6	ampere
Heater Warm-up Time (Average)	11	seconds
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts

Direct Interelectrode Capacitances:

Triode Unit:		
Grid to Plate	2.2	pF
Grid to Cathode, Heater, Pentode Cathode, Pentode Grid No.8, and Internal Shield	3.2	pF
Plate to Cathode, Heater, Pentode Cathode, Pentode Grid No.8, and Internal Shield	1.8	pF
Pentode Unit:		
Grid No.1 to Plate	0.06 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	10	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	3.6	pF
Pentode Grid No.1 to Triode Plate	0.008 max	pF
Pentode Plate to Triode Plate	0.15 max	pF

Class A Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	330	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	330	volts
Grid-No.2 Voltage	—	See curve page 98	
Grid-No.1 (Control-Grid) Voltage:			
Positive-bias value	4	0	volts
Negative-bias value	-55	-55	volts
Grid-No.1 Current	8	0	mA
Plate Dissipation	1.1	3.75	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 165 volts	—	1.1	watts
For grid-No.2 voltages between 165 and 330 volts	—	See curve page 98	

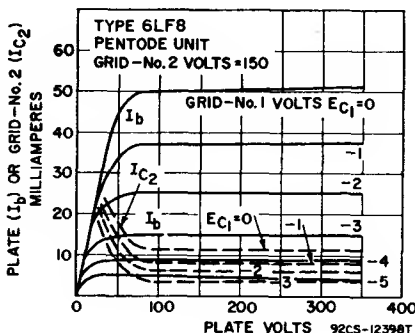
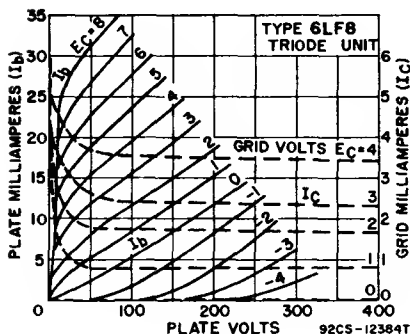
CHARACTERISTICS

	Triode Unit		Pentode Unit		
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	50*	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

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

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



6LJ6

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 type 1G3GT/1B3GT.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.2	amperes
Heater Cathode Voltage	+0, -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.

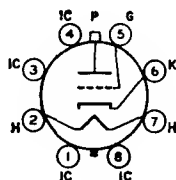
Shunt Voltage-Regulator Service

MAXIMUM RATINGS (Design-Maximum Values)

Plate Voltage	27000	volts
Unregulated Plate Supply Voltage	60000	volts
Negative Grid Voltage	135	volts
Peak Negative Grid Voltage*	440	volts
Plate Dissipation	40	watts
Average Plate Current	1.6	mA

TYPICAL OPERATION

Unregulated DC Supply Voltage	36000	volts
Equivalent Resistance of Unregulated Supply	11	megohms
DC Reference Voltage	200	volts



8MQ