

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	
Plate Voltage	300	volts
Grid Voltage:		
Positive-bias value	0	volts
Negative-bias value	50	volts
Plate Dissipation	1.1	watts

CHARACTERISTICS

	Triode Unit	Pentode Unit	
Plate Supply Voltage	200	150	volts
Grid-No.2 Supply Voltage	—	100	volts
Grid-No.1 Voltage	—2	—	volts
Cathode-Bias Resistor	—	180	ohms
Amplification Factor	70	—	
Plate Resistance (Approx.)	17500	100000	ohms
Transconductance, Grid No.1 to Plate	4000	4400	μ mhos
Transconductance, Grid No.3 to Plate	—	600	μ mhos
Plate Current	4	4	mA
Grid-No.2 Current	—	2.8	mA
Grid-No.1 Voltage (Approx.):			
For plate current of 10 μ A	—5	—	volts
For plate current of 20 μ A	—	—4	volts
Grid-No.3 Voltage (Approx.) for plate current of 20 μ A	—	—7*	volts

MAXIMUM CIRCUIT VALUES

	Triode Unit	
Grid-Circuit Resistance:		
For fixed-bias operation	0.25	megohm
For cathode-bias operation	1	megohm

* With no external connection to triode plate and triode grid.

Gated AGC Amplifier and Noise Inverter

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Maximum Values)

	Pentode Unit	
DC Plate Voltage	300	volts
Peak Positive-Pulse Plate Voltage#	600	volts
Grid-No.3 (Control-Grid) Voltage:		
Positive-bias value	0	volts
Negative-bias value	100	volts
Grid-No.2 (Screen-Grid) Supply Voltage	300	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage:		
Positive-bias value	0	volts
Negative-bias value	50	volts
Plate Dissipation	2	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	1.1	watts
For grid-No.2 voltages between 150 and 300 volts	See curve page 98	

MAXIMUM CIRCUIT VALUES

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

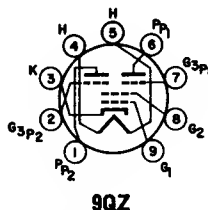
Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

6LE8

10LE8, 15LE8

TWIN PENTODE

Miniature type used as combined color demodulator and matrix amplifier in color television receivers utilizing high-level demodulation systems. Outlines section, 6G; requires miniature 9-contact socket. Types 10LE8 and 15LE8 are identical with type 6LE8 except for heater ratings.



9QZ

	6LE8	10LE8	15LE8	
Heater Voltage (ac/dc)	6.3	10.0	15.0	volts
Heater Current	0.76	0.45	0.30	ampere
Heater Warm-up Time (Average)	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	+200, —300 max			volts
Average value	100 max			volts

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

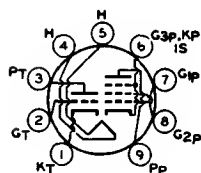
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MAXIMUM RATINGS (Design-Maximum Values)

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	