

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

	Triode Unit	Pentode Unit	
Plate Voltage	—	330	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	330	volts
Grid-No.2 Voltage	—	See curve page 300	
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2	5	watts
Grid-No.2 Input:			
For voltages up to 165 volts	—	1.1	watts
For voltages between 165 and 330 volts	—	See curve page 300	

CHARACTERISTICS

	Triode Unit	Pentode Unit	
Plate Supply Voltage	125	35	200
Grid-No.2 Supply Voltage	—	100	100
Grid-No.1 Voltage	—	0	—
Cathode-Bias Resistor	68	—	82
Amplification Factor	46	—	—
Plate Resistance (Approx.)	4400	—	60000
Transconductance	10400	—	20000
Plate Current	15	54	19.5
Grid-No.2 Current	—	13.5	3
Grid-No.1 Voltage (Approx.) for plate current of 10 μ A	—8	—	—
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	—	—	—6.3

MAXIMUM CIRCUIT VALUES

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

6KS6

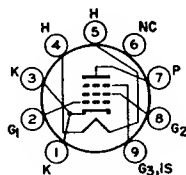
For replacement use type 6BN6/6KS6.

6KT6

3KT6, 4KT6

SEMIREMOTE-CUTOFF
PENTODE

Miniature type with frame grid used as if-amplifier tube in television receivers utilizing an intermediate frequency in the order of 40 MHz. Outlines section, 6B; requires miniature 9-contact socket. Types 3KT6 and 4KT6 are identical with type 6KT6 except for heater ratings.



9PM

	3KT6	4KT6	6KT6	
Heater Voltage (ac/dc)	3.5	4.5	6.3	volts
Heater Current	0.6	0.45	0.3	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
Direct Interelectrode Capacitances:				
Grid No.1 to Plate			0.019 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			9.5	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			3	pF

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MAXIMUM RATINGS (Design-Maximum Values)

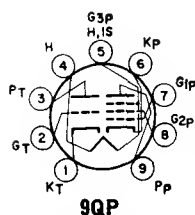
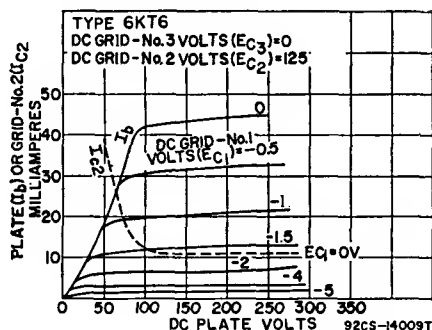
Plate Voltage	330	volts
Grid-No.3 (Suppressor-Grid) Voltage	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	330	volts
Grid-No.2 Voltage	See curve page 300	
Grid-No.1 (Control-Grid) Voltage	0	volts
Plate Dissipation	3.1	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 165 volts	0.6	watt
For grid-No.2 voltages between 165 and 330 volts	See curve page 300	

CHARACTERISTICS

Plate Supply Voltage	125	170	volts
Grid-No.3 Voltage	0	0	volts
Grid-No.2 Supply Voltage	125	170	volts
Cathode-Bias Resistor	56	56	ohms
Plate Resistor	160000	—	ohms
Transconductance	18000	—	μ mhos
Plate Current	17	—	mA
Grid-No.2 Current	4.2	—	mA
Grid-No.1 Voltage (Approx.) for transconductance of 10 μ mhos	—	-22	volts

MAXIMUM CIRCUIT VALUES

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



HIGH-MU TRIODE— SHARP-CUTOFF PENTODE

6KT8

Miniature type used in color and black-and-white television receiver applications. The pentode unit is used as an if-amplifier tube, and the triode unit as a sync-separator or voltage-amplifier tube. Outlines section, 6B; requires miniature 9-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.6	ampere
Heater-Cathode Voltage:		
Peak value	± 200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Triode Unit:	Unshielded	Shielded
Grid to Plate	3	3
Grid to Cathode, Heater, Grid No.3 of Pentode Unit, and Internal Shield	3.2	3.2
Plate to Cathode, Heater, Grid No.3 of Pentode Unit, and Internal Shield	1.6	2.4
Pentode Unit:		
Grid No.1 to Plate	0.046 max	0.030 max
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	7.5	7.5
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	2.2	2.8
Grid of Triode Unit to Plate of Pentode Unit	0.018 max	0.003 max
Grid No.1 of Pentode Unit to Plate of Triode Unit	0.006 max	0.002 max

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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 300