

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	100	250	315 Volts
Screen Voltage	100	250	250 Volts
Control Grid Bias Voltage ⁽¹⁾	-7	-18	-21 Volts
Peak AF Grid Voltage	7	18	21 Volts
Zero Signal Plate Current	9	32	25.5 Ma
Zero Signal Screen Current	1.6	5.5	4.0 Ma
Maximum Signal Plate Current	9.5	33	28 Ma
Maximum Signal Screen Current	3	10	9 Ma
Transconductance	1500	2300	2100 μ mhos
Plate Resistance (Approx.)	104,000	90,000	110,000 Ohms
Load Resistance	12,000	7600	9000 Ohms
Power Output	0.35	3.4	4.5 Watts
Total Harmonic Distortion	11	11	15 Percent

Push-Pull Class A1 Amplifier (Values for Two Tubes)

	Fixed Bias	Self Bias
Plate Voltage	285	285 Volts
Screen Voltage	285	285 Volts
Control Grid Bias Voltage ⁽¹⁾	-25.5	— Volts
Cathode Bias Resistor	—	400 Ohms
Peak AF Grid to Grid Voltage	51	51 Volts
Zero Signal Plate Current	55	55 Ma
Zero Signal Screen Current	9	9 Ma
Maximum Signal Plate Current	72	61 Ma
Maximum Signal Screen Current	17	13 Ma
Load Resistance (Plate to Plate)	12,000	12,000 Ohms
Maximum Signal Power Output	10.5	9.8 Watts
Total Harmonic Distortion	6	4 Percent

NOTE:

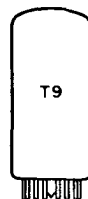
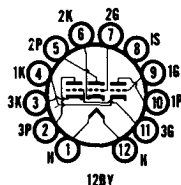
- (1) The DC resistance in the grid circuit under rated maximum conditions should not exceed 0.5 megohm for self-bias operation, and 0.1 megohm for fixed-bias operation.

AGC, SYNC CLIPPER and NOISE INVERTER

6K11/6Q11

**Two High Mu Triodes and
One Medium Mu Triode**

Construction.....Compactron T-9
Base Button 12 Pin, E12-70
Basing 12BY
Outline 9-56
Maximum Diameter 1.188 In.
Maximum Seated Height 1.500 In.
Maximum Overall Height 1.846 In.

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

Heater Voltage	6.3 Volts
Heater Current	600 Ma
Heater Warm-up Time	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)

	Section No. 1	Section No. 2	Section No. 3
Grid to Plate	1.3	1.3	1.3 Pf
Input: g to (h + k + IS)	1.9	1.8	1.8 Pf
Output: p to (h + k + IS)	1.8	0.7	1.8 Pf

RATINGS (Design Maximum Rating System)

	Section No. 1	Section No. 2 and No. 3
Plate Voltage (Max.)	330	330 Volts
Plate Dissipation (Max.)	2.75	0.3 Watts
Cathode Current (Max.)	20	— Ma
Positive Grid Voltage (Max.)	0	0 Volt
Negative Grid Voltage (Max.)	50	50 Volts

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

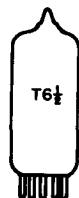
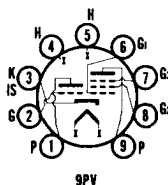
	Section No. 1	Section No. 2 and No. 3
Plate Voltage	250	250 Volts
Grid Voltage	-8.5	-2.0 Volts
Plate Current	10.5	1.2 Ma
Plate Resistance	7700	62,500 Ohms
Transconductance	2200	1600 μ mhos
Amplification Factor	17	100
Ec for Ib = 10 μ a	-24	— Volts

6KA8**8KA8**

Color Television Type

**SYNC SEPARATOR (T)
AGC AMP and NOISE INVERTER (P)****High Mu Triode and
Sharp Cutoff Pentode**

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

**ELECTRICAL DATA
HEATER OPERATION**

	8KA8	6KA8
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 + IS)	2.8 Pf
Output: p to (k + h + IS)	2.2 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.1 Pf
Input: g1 to (h + k + g2 + g3 + IS)	9.5 Pf
Grid No. 3 to (h + k + g2 + g1 + IS)	7 Pf
Grid No. 1 to Grid No. 3	0.5 Pf
Grid No. 3 to Plate	2.2 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
Grid No. 3 Circuit Resistance (Max.)	—	0.68 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

	Triode Section	Pentode Section
Plate Supply Voltage	200	150 Volts
Grid No. 2 Voltage	—	100 Volts