

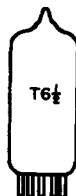
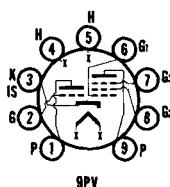
6KA8

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**

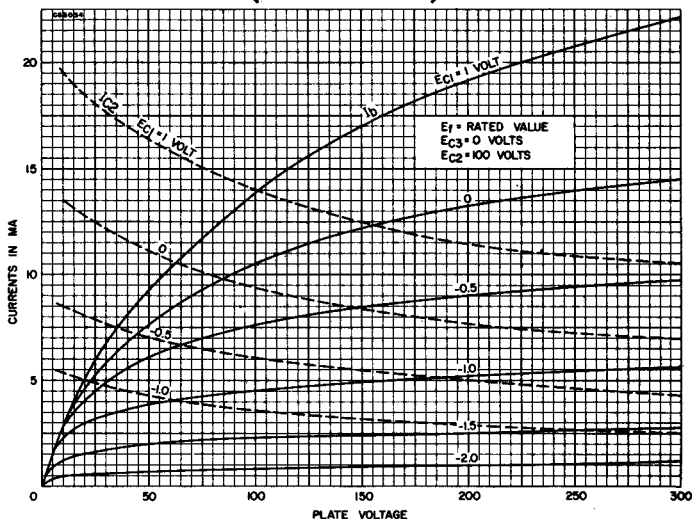
	Triode Section	Pentode Section
Plate Supply Voltage.....	200	150 Volts
Grid No. 2 Voltage	—	100 Volts

Grid No. 1 Voltage	-2	0 Volts
Cathode Bias Resistor	—	180 Ohms
Plate Current	4	4 Ma
Grid No. 2 Current	—	2.8 Ma
Amplification Factor	70	—
Plate Resistance (Approx.)	17,500	100,000 Ohms
Transconductance (G1 to P)	4000	4400 μ mhos
Transconductance (G3 to P)	—	600 μ mhos
E_{c3} for $I_b = 20 \mu$ a (Approx.)	—	-7 Volts
E_{c1} for $I_b = 10 \mu$ a (Approx.)	-5	— Volts
20 μ a (Approx.)	—	-4 Volts

NOTE:

(1) The duration of the voltage pulse must not exceed 15% of one horizontal scanning cycle. In a 525-line, 30-frame system, 15% of one horizontal scanning cycle is 10 μ sec.

**AVERAGE PLATE CHARACTERISTICS
(Pentode Section)**



**AVERAGE PLATE CHARACTERISTICS
(Triode Section)**

