ELECTRICAL DATA

HEATER OPERATION

	3AL5	6AL5	12AL5
Heater Voltage	3.15	6.3	12.6 Volts
Heater Current	600	300	150 Ma
Heater Warm-up Time	11	—	— Seconds
Maximum Heater-Cathode Voltage	200	330	330 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Shielded (1)	Unshielded
Plate Input (Each Section)	3.2	2.5 Pf
Plate to Plate	0.026	0.068 Pf
Cathode Input (Each Section)	3.6	3.4 Pf

RATINGS (Design Maximum Rating System)

Peak Inverse Plate Voltage (Max.)	330 Volts
Peak Plate Current Each Plate (Max.)	54 Ma
DC Output Current Each Plate (Max.)	9.0 Ma
AC Plate Voltage (Per Plate) (Max.)	117 Volts
Effective Plate Supply Impedance (Each Plate) (Min.)	300 Ohms

CHARACTERISTICS AND TYPICAL OPERATION

Tube Voltage Drop for Ib = 60 Ma	10 Volts

NOTE:

(1) Shield No. 316 connected to Pin No. 6.

6AL9

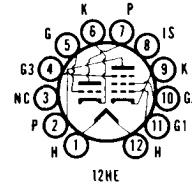
8AL9

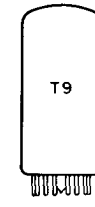
Color Television Type

GENERAL PURPOSE AMPLIFIER (T) VIDEO AMPLIFIER (P)

High Mu Triode and Sharp Cutoff Pentode

Construction.....Compactron T-9
Base E12-70
Basing 12HE
Outline 9-59
Maximum Diameter .....1.188 In.
Maximum Seated Height .....2.250 In.
Maximum Overall Height .....2.625 In.





ELECTRICAL DATA

HEATER OPERATION

	6AL9	8AL9
Heater Voltage	6.3	8.6 Volts
Heater Current	820	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)

Triode Section	
Grid to Plate	2.8 pf
Input: g to (h + Tk + Pk, g3, I.S.)	3.6 pf
Output: p to (h + Tk + Pk, g3, I.S.)	2.2 pf
Pentode Section	
Grid No. 1 to Plate (Max.)	0.16 pf
Input: g1 to (h + Pk, g3, I.S. + g2)	17 pf
Output: p to (h + Pk, g3, I.S. + g2)	6.4 pf

RATINGS (Design Maximum Values)

	Triode Section	Pentode Section
Plate Voltage	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	200 Volts
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Grid No. 2 Dissipation (Max.)	—	1.5 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.1 Megohm
Cathode Bias (Max.)	1.0	0.25 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section	
Plate Voltage	200	55	250 Volts
Grid No. 1 Voltage	—	0	— Volt
Grid No. 2 Voltage	—	125	150 Volts
Cathode Bias Resistor	270	—	56 Ohms
Plate Current	7.6	56	28 Ma
Grid No. 2 Current	—	21	5.6 Ma
Transconductance	6300	—	30,000 μmhos
Amplification Factor	59	—	—
Plate Resistance (Approx.)	9200	—	40,000 Ohms
Ec1 for Ib = 100 μa (Approx.)	−63	—	−5.4 Volts

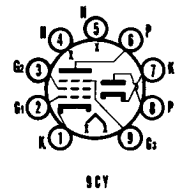
VIDEO DETECTOR AND IF AMPLIFIER

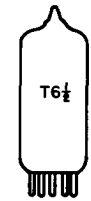
6AM8A

5AM8

Diode and Sharp Cutoff Pentode

Construction .....Miniature T-6½
Base .....Button 9 Pin, E9-1
Basing 9CY
Outline 6-2
Maximum Diameter .....0.875 In.
Maximum Seated Height .....1.938 In.
Maximum Overall Height .....2.188 In.





ELECTRICAL DATA

HEATER OPERATION

	5AM8 Series	6AM8A Parallel
Heater Voltage	4.7	6.3 Volts
Heater Current	600	450 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 (Shielded)[1]

Pentode	
Grid to Plate (Max.)	0.015 Pf
Input	6.0 Pf
Output	3.4 Pf
Diode	
Input: p to (h + k)	2.3 Pf
Cathode to (h + p)	3.0 Pf
Coupling	
Diode Plate to Pentode Plate	0.035 Pf
Diode Plate to Pentode Grid No. 1	0.005 Pf
Diode Cathode to Pentode Plate	0.15 Pf

RATINGS (Design Center Rating System)

Pentode	
Plate Voltage (Max.)	330 Volts
Plate Dissipation (Max.)	3.2 Watts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 2 Supply Voltage (Max.)	330 Volts
Grid No. 2 Dissipation (Max.)	0.55 Watt
Positive Grid No. 1 Voltage (Max.)	0 Volt
Grid No. 3 Voltage (Max.)	0 Volt
Grid No. 1 Circuit Resistance	
Cathode Bias (Max.)	1.0 Megohm
Fixed Bias (Max.)	0.25 Megohm
Diode	
Diode Current for Continuous Operation (Max.)	5.0 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Pentode	
Plate Voltage	125 Volts
Grid No. 2 Voltage	125 Volts
Cathode Resistor	56 Ohms