RATINGS (Design Center Rating System)

Plate Voltage (Max.)	150 Volts
Grid No. 2 Voltage (Max.)	117 Volts
Plate Dissipation (Max.)	5.5 Watts
Grid No. 2 Dissipation (Max.)	1.0 Watt
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Voltage	150 Volts
Grid No. 2 Voltage	110 Volts
Grid No. 1 Voltage	8.5 Volts
Peak AF Grid No. 1 Voltage	8.5 Volts
Plate Current (Zero Signal)	35 Ma
Plate Current (Maximum Signal)	36 Ma
Grid No. 2 Current (Zero Signal)	2 Ma
Grid No. 2 Current (Maximum Signal)	6.5 Ma
Transconductance	5600 μmhos
Load Resistance	4500 Ohms
Total Harmonic Distortion	10 Percent
Maximum Signal Power Output	2.2 Watts

Color Television Type

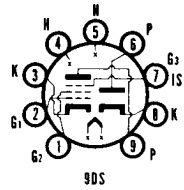
AUDIO/VIDEO DETECTOR or DC RESTORER (D) IF/VIDEO/AGC AMPLIFIER (P)

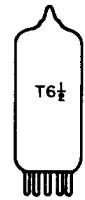
6AS8

5AS8

High Perveance Diode and Sharp Cutoff Pentode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	9DS
Outline	6-2
Maximum Diameter	0.875 In.
Maximum Seated Height	1.937 In.
Maximum Overall Height	2.187 In.





ELECTRICAL DATA

HEATER OPERATION

	5AS8 Series	6AS8 Parallel
Heater Voltage	4.7	6.3 Volts
Heater Current	600	450 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)

Pentode Section	
Grid No. 1 to Plate (Max.)	0.03 Pf
Input: g1 to (h + k + g2 + g3)	7.0 Pf
Output: p to (h + k + g2 + g3)	2.4 Pf
Coupling	
Pentode Grid to Diode Plate (Max.)	0.005 Pf
Pentode Plate to Diode Cathode (Max.)	0.15 Pf
Pentode Plate to Diode Plate (Max.)	0.10 Pf
Diode Section	
Plate to Heater, Cathode and Internal Shield	3.0 Pf

RATINGS (Design Center Rating System)

Pentode Section	
Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	2.5 Watts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 2 Supply Voltage (Max.)	300 Volts
Grid No. 2 Dissipation (Max.)	0.5 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 Section	
Peak Inverse Plate Voltage (Max.)	330 Volts
Peak Plate Current (Max.)	50 Ma
DC Plate Current (Max.)	5 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

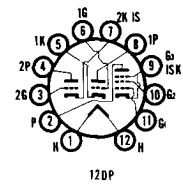
Plate Supply Voltage	200 Volts
Grid No. 2 Supply Voltage	150 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket
Cathode Resistor	180 Ohms
Plate Current	9.5 Ma
Grid No. 2 Current	3.0 Ma
Transconductance	6200 μmhos
Plate Resistance (Approx.)	0.3 Megohm
Grid No. 1 Voltage for Ib = 10 μa (Approx.)	−8 Volts

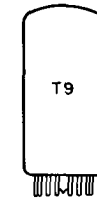
6AS11

AF/IF AMPLIFIER (1T)
SYNC SEPARATOR (2T)
VIDEO AMPLIFIER (P)

Medium Mu Triode, High Mu Triode and Sharp Cutoff Pentode

Construction	Compactron T-9
Base	Button 12 Pin, E12-70
Basing	12DP
Outline	9-58
Maximum Diameter	1.188 In.
Maximum Seated Height	2.000 In.
Maximum Overall Height	2.375 In.





ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	1050 Ma
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

Triode (Section 1)	
Grid to Plate	1.9 Pf
Input: T1g to (T1k + T2k + Pk + Pg3 + IC + IS)	3.0 Pf
Output: T1p to (T1k + T2k + Pk + Pg3 + IC + IS)	2.2 Pf
Triode (Section 2)	
Grid to Plate	3.6 Pf
Input: T2g to (T2k + Pk + Pg3 + IC + IS)	2.4 Pf
Output: T2p to (T2k + Pk + Pg3 + IC + IS)	3.8 Pf
Pentode	
Grid 1 to Plate	0.11 Pf
Input: Pg1 to (T2k + Pk + Pg2 + Pg3 + IC + IS)	9.5 Pf
Output: Pp to (T2k + Pk + Pg2 + Pg3 + IC + IS)	4.4 Pf
Coupling	
Pentode Plate to Triode Plate (Section 2) (Max.)	0.044 Pf
Triode Plate (Section 1) to Triode Plate (Section 2) (Max.)	0.06 Pf

RATINGS (Design Maximum Rating System)

Triode (Section 1)	
Plate Voltage (Max.)	330 Volts
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	1.5 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.5 Megohm
Cathode Bias (Max.)	1.0 Megohm