

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**

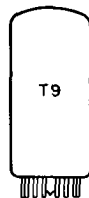
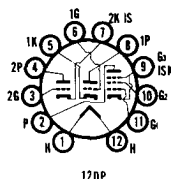
Plate Supply Voltage	200 Volts
Grid No. 2 Supply Voltage	150 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket
Cathode Resistor	180 Ohms
Plate Current	9.5 Ma
Grid No. 2 Current	3.0 Ma
Transconductance	6200 μ mhos
Plate Resistance (Approx.)	0.3 Megohm
Grid No. 1 Voltage for $I_b = 10 \mu$ a (Approx.)	-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

Triode (Section 2)

Plate Voltage (Max.)	330 Volts
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	2.0 Watts
Grid 1 Circuit Resistance	
Fixed Bias (Max.)	0.5 Megohm
Cathode Bias (Max.)	1.0 Megohm

Pentode Section

Plate Voltage (Max.)	330 Volts
Screen Supply Voltage (Max.)	330 Volts
Screen Voltage	See Rating Chart (Gen. Info. Sec.)
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	5.0 Watts
Screen Dissipation (Max.)	1.1 Watts
Grid 1 Circuit Resistance	
Fixed Bias (Max.)	0.25 Megohm
Cathode Bias (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Triode (Section 1)**

Plate Voltage	200 Volts
Grid Voltage	-2.0 Volts
Plate Current	7.0 Ma
Transconductance	5500 μ mhos
Plate Resistance (Approx.)	12,400 Ohms
Amplification Factor	68
Grid Voltage for $I_b = 10 \mu$ a.	-5.5 Volts

Triode (Section 2)

Plate Voltage	200 Volts
Cathode Bias Resistor	220 Ohms
Plate Current	9.2 Ma
Transconductance	4400 μ mhos
Plate Resistance (Approx.)	9400 Ohms
Amplification Factor	41
Grid Voltage for $I_b = 100 \mu$ a.	-6.5 Volts

Pentode Section

Plate Voltage	200 Volts
Screen Voltage	125 Volts
Cathode Bias Resistor	68 Ohms
Plate Current	24 Ma
Screen Current	5.2 Ma
Transconductance	10,500 μ mhos
Plate Resistance (Approx.)	70,000 Ohms
Grid 1 Voltage for $I_b = 10 \mu$ a.	-8 Volts

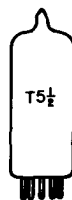
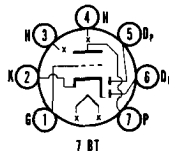
Color Television Type

AF AMPLIFIER AND DETECTOR**6AT6**

12AT6

Double Diode and High Mu Triode

Construction	Miniature T-5½
Base	Button 7 Pin
Basing	7BT
Outline	5-2
Maximum Diameter	0.750 In.
Maximum Seated Height	1.875 In.
Maximum Overall Height	2.125 In.

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

	12AT6	6AT6
Heater Voltage.....	12.6	6.3 Volts
Heater Current	150	300 Ma
Maximum Heater-Cathode Voltage	90	90 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Shielded ⁽¹⁾	Unshielded
Grid to Plate	2.0	2.0 Pf
Input: g to (h + k)	2.2	2.2 Pf
Output: p to (h + k)	1.2	0.8 Pf
Diode Plate No. 2 to Grid (Max.)	0.04	0.04 Pf