

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

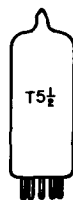
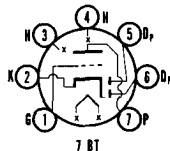
Color Television Type

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

RATINGS (Design Maximum Rating System)**Triode**

Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	0.5 Watt
Positive-Grid Voltage (Max.)	0 Volt

Diode

Diode Current (Each Section) (Max.)	1.0 Ma
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CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

Plate Voltage	100	250 Volts
Grid Voltage	-1	-3 Volts
Plate Current	0.8	1.0 Ma
Transconductance	1300	1200 μ mhos
Amplification Factor	70	70
Plate Resistance	54,000	58,000 Ohms
Average Diode Current at 10 Volts DC ⁽²⁾	2.0	2.0 Ma

NOTES:

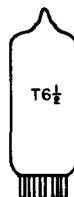
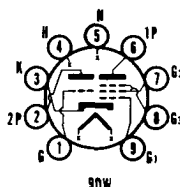
- (1) Shield No. 316 connected to cathode.
 (2) Test condition only.

6AT8A**5AT8**

Color Television Type

VHF OSCILLATOR AND MIXER**Medium Mu Triode and Sharp Cutoff Pentode**

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

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

	5AT8	6AT8A
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⁾	Unshielded
Triode Section		
Grid to Plate	1.5	1.5 Pf
Input	2.4	2.0 Pf
Output	1.0	0.5 Pf
Pentode Section		
Grid No. 1 to Plate (Max.)	0.016	0.025 Pf
Input	4.7	4.5 Pf
Output	1.6	0.9 Pf
Pentode Section Triode Connected⁽²⁾		
Grid No. 1 to Plate	1.3	1.3 Pf
Input	3.3	3.0 Pf
Output	2.5	1.7 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)	0.04	0.05 Pf
Pentode Plate to Triode Plate (Max.)	0.007	0.05 Pf
Heater to Cathode	6.5 ⁽³⁾	6.5 Pf