

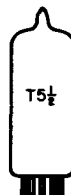
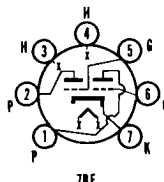
Color Television Type

**HIGH FREQUENCY OSCILLATOR,
AMPLIFIER or MIXER****6J6A**

5J6, 19J6

Double Triode

Construction Miniature T-5½
 Base Button 7 Pin, E7-1
 Basing 7BF
 Outline 5-2
 Maximum Diameter 0.750 In.
 Maximum Seated Height 1.875 In.
 Maximum Overall Height 2.125 In.

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

	19J6	5J6	6J6A
Heater Voltage.....	18.9	4.7	6.3 Volts
Heater Current.....	150	600	450 Ma
Heater Warm-up Time.....	—	11	11 Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak.....			100 Volts
Heater Positive with Respect to Cathode			
Total DC and Peak.....			100 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate	1.6 Pf
Grid to Cathode	2.2 Pf
Plate to Cathode	0.4 Pf

RATINGS (Design Center Rating System) (Each Section)

Plate Voltage (Max.)	300 Volts
Plate Dissipation (Max.)	1.5 Watts
Plate Current (Max.)	15 Ma
Grid Voltage (Max.)	-40 Volts
Grid Current (Max.)	8.0 Ma

CHARACTERISTICS AND TYPICAL OPERATION (Each Section)**Class A1 Amplifier**

Plate Voltage	100 Volts
Self Bias Resistor ^(1,2)	50 Ohms
Plate Current	8.5 Ma
Transconductance	5300 μ mhos
Amplification Factor	38
Plate Resistance	7100 Ohms

Class C Oscillator or RF Amplifier (Push-Pull)

Plate Voltage	150 Volts
Grid Voltage ⁽³⁾	-10 Volts
Plate Current	30 Ma
Grid Current	16 Ma
Driving Power	0.35 Watt
Power Output	3.5 Watts

Mixer Service

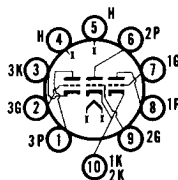
Plate Voltage	150 Volts
Cathode Bias Resistor ⁽²⁾	820 Ohms
Oscillator Peak Voltage	3 Volts
Plate Current	4.8 Ma
Plate Resistance.....	10,000 Ohms
Conversion Transconductance	1900 μ mhos

NOTES:

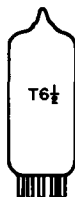
- (1) Value is for both sections operating as specified.
- (2) Under rated maximum conditions, total grid circuit resistance should not exceed 0.5 megohm. Fixed bias operation is not recommended.
- (3) Obtained by a grid resistor of 625 ohms or a cathode resistor of 220 ohms.

6J9**VHF AMPLIFIER, OSCILLATOR
and MIXER****Triple Triode**

Construction Miniature T-6½
 Base Button 10 Pin, E10-73
 (Center Pin Added to 9 Pin Base)
 Basing⁽¹⁾ 10G
 Outline 6-13
 Maximum Diameter 0.875 In.
 Maximum Seated Height 1.940 In.
 Maximum Overall Height 2.190 In.



10 G

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

Heater Voltage.....	6.3 Volts
Heater Current.....	450 Ma
Heater Warm-up Time.....	11 Seconds
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	100 Volts
Heater Positive with Respect to Cathode	
Total DC and Peak.....	100 Volts

DIRECT INTERELECTRO CAPACITANCES

	Shielded ⁽²⁾	Unshielded
Grid to Plate (Section 1 and 3)	1.6	1.6 Pf
Grid to Plate (Section 2)	1.5	1.5 Pf
Input (Each Section)	2.6	2.4 Pf
Output (Section No. 1)	1.1	0.28 Pf
Output (Section No. 2)	1.5	0.44 Pf
Output (Section No. 3)	1.1	0.26 Pf
Heater to Cathode (Section No. 3)	3.2	3.2 Pf
Heater to Cathode (Sections 1 and 2)	6.2	6.2 Pf

RATINGS (Design Maximum Rating System) (Each Section)

Plate Voltage (Max.)	330 Volts
Plate Dissipation (Each Plate) (Max.)	2.0 Watts
Plate Dissipation (Plates 1, 2, and 3) (Max.)	5.0 Watts
Positive Grid Voltage (Max.)	0 Volt
Negative Grid Voltage (Max.)	50 Volts

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier (Each Section)**

Plate Voltage	125 Volts
Grid Voltage	-1.0 Volts
Plate Current	6.0 Ma
Plate Resistance.....	11,000 Ohms
Transconductance	5200 μ mhos
Amplification Factor	57
Ec for Ib = 20 μ a (Approx.)	-5.4 Volts

NOTES:

- (1) Section No. 1 connects to Pins 7, 8, and 10; Section No. 2 connects to Pins 6, 9, and 10;
 Section No. 3 connects to Pins 1, 2, and 3.
 (2) Shield No. 315 ties to cathode of triode under test.

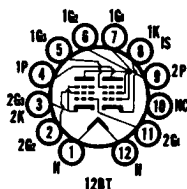
6J10

13J10/13Z10

Color Television Type

**FM DISCRIMINATOR and
AUDIO POWER AMPLIFIER****Double Dissimilar Pentodes**

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



12BT

