

Cathode Current (Max.)	22	20 Ma
Plate Dissipation (Max.)	1.8	2.4 Watts
Grid No. 2 Dissipation (Max.)	—	0.55 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	2.2 Megohms
Cathode Bias (Max.)	0.5	1 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Triode as Oscillator**

DC Plate Supply Voltage	200	200 Volts
Plate Load Resistance	8200	12,000 Ohms
External Grid to Cathode Resistance	10,000	10,000 Ohms
Plate Current	16	12 Ma
Oscillator Voltage (Effective)	4.5	3.3 Volts
Transconductance (Effective)	3700	3700 μ mhos

Pentode Section as Mixer

Plate Supply Voltage	200	200 Volts
Plate Load Resistance	2700	4700 Ohms
DC Grid No. 2 Supply Voltage	200	200 Volts
Grid No. 2 Resistance	27,000	27,000 Ohms
DC Grid No. 1 Supply Voltage	-1.2	0 Volts
Grid No. 1 Resistance	0.1	1 Megohm
Oscillator Voltage (Effective)	1.6	1.6 Volts
Plate Current	10	9 Ma
DC Grid No. 2 Current	3	2.8 μ a
DC Grid No. 1 Current	10	2.3 μ a
Conversion Transconductance	5000	4700 μ mhos
Input Resistance at 200 Hz	600	600 Ohms

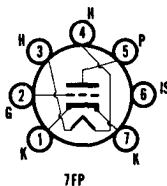
Pentode Section as an If Amplifier

Plate Supply Voltage	200	200 Volts
Plate Load Resistance	2700	4700 Ohms
Grid No. 2 Resistance	27,000	27,000 Ohms
Grid No. 1 Resistance	0.1	1 Megohm
DC Grid No. 1 Supply Voltage	-1.2	0 Volts
Plate Current	10	12.5 Ma
DC Grid No. 2 Current	3	3.7 Ma
Transconductance	11,000	14,000 μ mhos
DC Grid No. 1 Voltage for Gm/100	-12	-15 Volts
Input Resistance at 50 Hz	10,000	10,000 Ohms
DC Grid No. 2 Supply Voltage	200	200 Volts

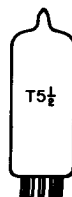
Color Television Type

VHF AMPLIFIER**6GK5/6FQ5A**2GK5/2FQ5A, 3FQ5A,
3GK5, 4GK5**Gain Controlled Triode**

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



7FP

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

	2GK5/2FQ5A	3FQ5A 3GK5	4GK5	6GK5/6FQ5A
Heater Voltage	2.3	2.8	4.0	6.3 Volts
Heater Current	600	450	300	180 Ma
Heater Warm-up Time	11	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 (Shielded)

Grid to Plate	0.52 Pf
Input: g to (h + k + IS + ES)	5.0 Pf
Output: p to (h + k + IS + ES)	3.5 Pf
Heater to Cathode	2.5 Pf

RATINGS (Design Maximum Rating System)

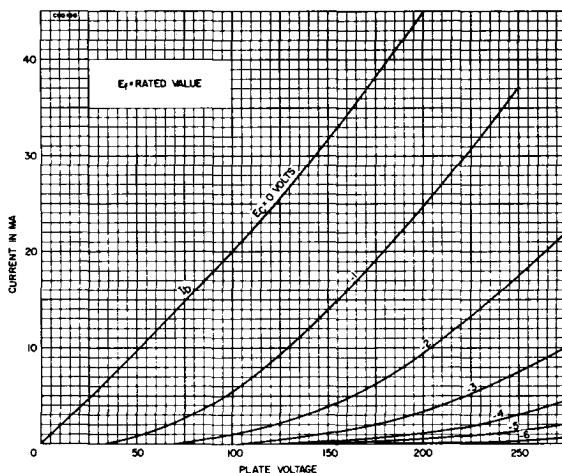
Plate Voltage (Max.)	200 Volts
Plate Dissipation (Max.)	2.5 Watts
DC Cathode Current (Max.)	22 Ma
Negative Grid Voltage (Max.)	50 Volts
Grid Circuit Resistance (Self Bias) (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Amplifier**

Plate Voltage	135 Volts
Grid Voltage	-1.0 Volts
Plate Current	11.5 Ma
Transconductance	15,000 μ mhos
Amplification Factor	78
Plate Resistance (Approx.)	5400 Ohms
E_c for $G_m = 150 \mu$ mhos (Approx.)	-4.2 Volts
E_c for $G_m = 1500 \mu$ mhos (Approx.)	-2.5 Volts
Input Resistance (200 Hz) ⁽¹⁾	275 Ohms
Input Capacitance (200 Hz) ⁽¹⁾	11.2 Pf
Noise Figure (200 Hz) ⁽²⁾	4.7 db

NOTES:

- (1) Measured under grounded plate conditions.
- (2) Optimized neutralized triode RF amplifier stage, noise matched.

AVERAGE PLATE CHARACTERISTICS**6GK6****10GK6, 16GK6**

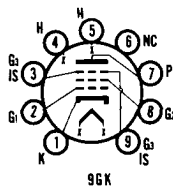
Color Television Type

**AUDIO POWER AMPLIFIER
or VIDEO AMPLIFIER****Beam Power Pentode**

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	9GK
Outline	6-4
Maximum Diameter	0.875 In.
Maximum Seated Height	2.812 In.
Maximum Overall Height	3.062 In.

**ELECTRICAL DATA
HEATER OPERATION**

Heater Voltage	
Heater Current	
Heater Warm-up Time	



9GK

16GK6

16.0

300

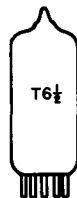
11

10GK6

10.0

450

11

**6GK6**

6.3 Volts

760 Ma

— Seconds