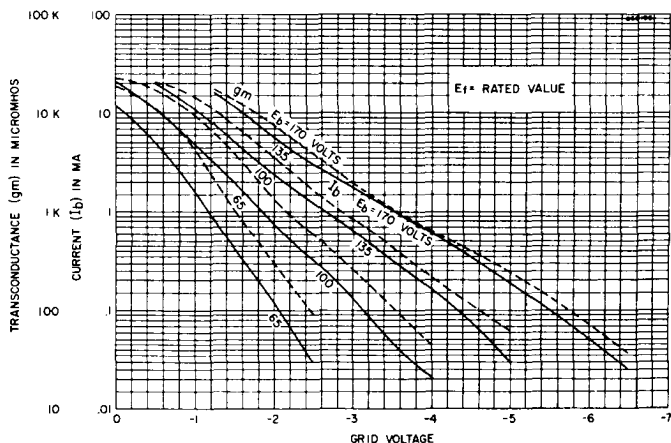
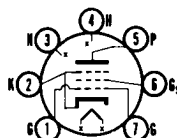


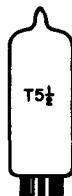
AVERAGE TRANSFER CHARACTERISTICS

**6HR5****VERTICAL DEFLECTION
AMPLIFIER****Beam Power Pentode**

Construction Miniature T-5½
 Base Button 7 Pin, E7-1
 Basing 7BZ
 Outline 5-3
 Maximum Diameter 0.750 In.
 Maximum Seated Height 2.375 In.
 Maximum Overall Height 2.625 In.



7BZ

**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.....	200 Volts
Heater Positive with Respect to Cathode.....	
DC.....	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid 1 to Plate.....	0.35 Pf
Input.....	8.3 Pf
Output.....	8.2 Pf

RATINGS (Design Maximum Rating System)**Vertical Deflection Amplifier⁽³⁾**

Plate Voltage (Max.).....	260 Volts
Peak Positive Pulse Plate Voltage (Abs. Max.).....	1500 Volts
Grid 2 Voltage (Max.).....	270 Volts
Peak Negative Pulse Grid 1 Voltage (Max.).....	150 Volts
Plate Dissipation (Max.).....	8 Watts
Grid 2 Dissipation (Max.).....	2 Watts
Cathode Current:	
Average (Max.).....	35 Ma
Peak (Max.).....	125 Ma
Grid 1 Circuit Resistance (Max.).....	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage.....	50	260 Volts
Grid 2 (Screen) Voltage.....	250	270 Volts
Grid 1 Voltage.....	0 ⁽¹⁾	-19 Volts
Transconductance.....	—	3600 μ mhos
Plate Current.....	105	30 Ma

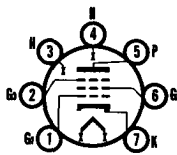
Grid 2 Current	25	2.3 Ma
Grid 1 Cutoff Voltage ⁽²⁾	—	-43 Volts

NOTES:

- (1) Applied for short interval (maximum of 2 seconds) so as not to damage tube.
- (2) For plate current of 100 μ a.
- (3) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

IF AMPLIFIER**6HR6****19HR6****Semi-Remote-Cutoff Pentode**

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



7BK

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

	19HR6	6HR6
Heater Voltage	18.9	6.3 Volts
Heater Current	150	450 Ma
Heater Warm-up Time	17	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)

Grid No. 1 to Plate (Max.)	0.006 Pf
Grid No. 1 to Cathode, Grid No. 3 and Internal Shield, Grid No. 2, and Heater	8.8 Pf
Plate to Cathode, Grid No. 3 and Internal Shield, Grid No. 2, and Heater	5.2 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Supply Voltage (Max.)	300 Volts
Grid No. 3 (Suppressor-Grid)	Connect to Cathode at Socket
Grid No. 2 (Screen-Grid) Supply Voltage (Max.)	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Grid No. 1 (Control-Grid) Voltage:	

Positive Bias Value (Max.)

0 Volt

Negative Bias Value (Max.)

50 Volts

Plate Dissipation (Max.)

3 Watts

Grid No. 2 Input:

For Grid No. 2 Voltages up to 150 Volts (Max.)

1 Watt

For Grid No. 2 Voltages between 150 and 300 Volts

See Rating Chart (Gen. Info. Sec.)

Maximum Circuit Values:

Grid No. 1 Circuit Resistance:	
For Fixed Bias Operation (Max.)	0.5 Megohm
For Cathode Bias Operation (Max.)	1 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Supply Voltage	200 Volts
Grid No. 3	Connected to Cathode at Socket
Grid No. 2 Supply Voltage	115 Volts
Grid No. 1 Supply Voltage	0 Volt
Cathode Resistor	68 Ohms
Plate Resistance (Approx.)	0.5 Megohm
Transconductance	8500 μ mhos
Plate Current	13.2 Ma
Grid No. 2 Current	4.3 Ma
Grid No. 1 Voltage (Approx.) for Transconductance = 60 μ mhos	-15 Volts