

ELECTRICAL DATA HEATER OPERATION

	50EH5A	35EH5A	25EH5	12EH5	6EH5
Heater Voltage.....	50	35	25	12.6	6.3 Volts
Heater Current	150	150	300	600	1200 Ma
Heater Warm-up Time	17	17	—	11	— Seconds
Maximum Heater-Cathode Voltage					
Heater Negative with Respect to Cathode					
Total DC and Peak.....	200	200	200	300	200 Volts
Heater Positive with Respect to Cathode					
DC	100	100	100	100	100 Volts
Total DC and Peak.....	200	200	200	200	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate	0.65 Pf
Input: g1 to (k + g3 + g2 + h)	17 Pf
Output: p to (k + g3 + g2 + h)	9 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Voltage (Max.)	150 Volts
Grid No. 2 Voltage (Max.)	130 Volts
Positive Grid No. 1 Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	5.5 Watts
Grid No. 2 Input (Max.)	2.00 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohms
Cathode Bias (Max.)	0.5 Megohms
Bulb Temperature at Hottest Point (Max.)	220 °C

CHARACTERISTICS AND TYPICAL OPERATION

	Push-Pull AB1 Amp.	A1 Amp.
Plate Voltage	140	110 Volts
Grid No. 2 Voltage	120	115 Volts
Cathode Resistor	68	62 Ohms
Peak AF Grid No. 1 Voltage	4.7	3 Volts
Zero Signal Plate Current	47	42 Ma
Maximum Signal Plate Current	51	42 Ma
Zero Signal Grid No. 2 Current.....	11	11.5 Ma
Maximum Signal Grid No. 2 Current	17.7	14.5 Ma
Transconductance	—	14,600 μ mhos
Plate Resistance (Approx.)	—	11,000 Ohms
Load Resistance	6000 ⁽¹⁾	3000 Ohms
Maximum Signal Power Output	3.8	1.4 Watts
Total Harmonic Distortion	5	7 Percent

NOTE:

(1) Plate to Plate.

Color Television Type

VHF/IF AMPLIFIER

6EH7/EF183

3EH7/XF183, 4EH7

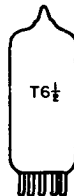
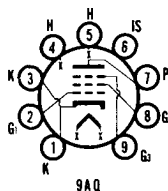
Semi-Remote Cutoff Pentode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9AQ
Outline

Maximum Diameter 0.875 In.
Maximum Seated Height 2.156 In.
Maximum Overall Height 2.406 In.

ELECTRICAL DATA HEATER OPERATION

	3EH7/XF183	4EH7	6EH7/EF183
Heater Voltage.....	3.4	4.4	6.3 Volts
Heater Current	600	450	300 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak.....			150 Volts
Heater Positive with Respect to Cathode			
Total DC and Peak.....			150 Volts



DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate (Max.).....	0.005 Pf
Input: g1 to (h + k + g2 + g3 + IS).....	9 Pf
Output: p to (h + k + g2 + g3 + IS).....	3 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage with Ib = 0 Ma (Max.)	550 Volts
Plate Voltage (Max.)	275 Volts
Grid No. 2 Voltage with Ic2 = 0 Ma (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	275 Volts
Plate Dissipation (Max.)	2.8 Watts
Grid No. 2 Dissipation (Max.)	0.75 Watt
Cathode Current (Max.).....	22 Ma
Grid No. 1 Circuit Resistance (Max.)	1.0 Megohm

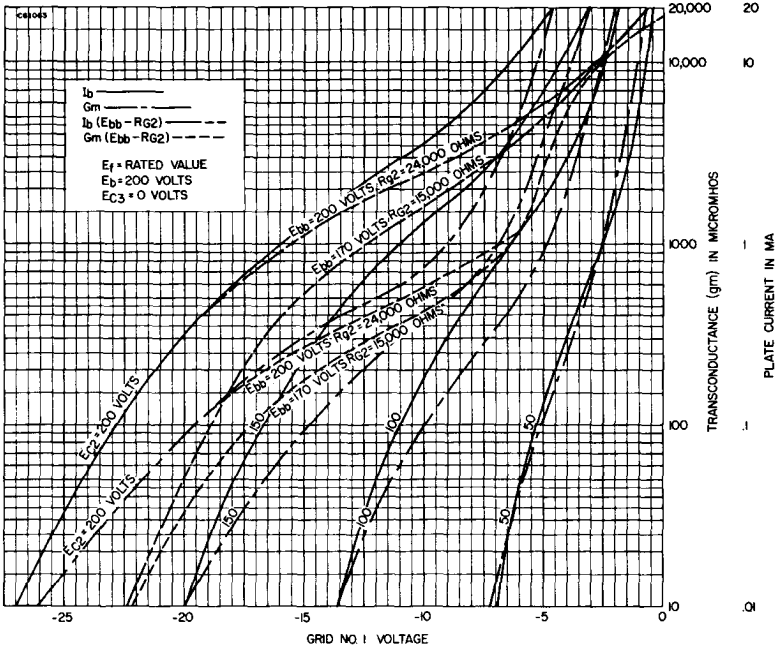
CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	200 Volts
Grid No. 3 Voltage	0 Volt
Grid No. 2 Voltage	90 Volts
Grid No. 1 Voltage	-2 Volts
Plate Current	12 Ma
Grid No. 2 Current	4.5 Ma
Transconductance	12,500 μ mhos
Plate Resistance (Approx.)	0.5 Megohm
Grid No. 1 Impedance at 40 MHz ⁽¹⁾	30,000 Ohms
Plate Voltage	200 Volts
Grid No. 3 Voltage	0 Volt
Grid No. 2 Supply Voltage.....	200 Volts
Grid No. 2 Series Resistor	22,000 Ohms
Grid No. 1 Voltage	-19.5 -9.5 -6.5
Transconductance	125 625 1250
Ec1 for a Cross Mod. Factor of 1%	450 160 100
	12,500 μ mhos
	— Mv rms

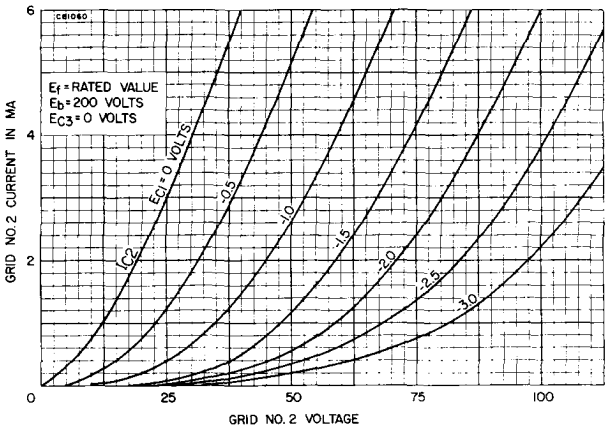
NOTE:

(1) Input damping of tube and typical ceramic socket with both cathode leads returned directly to ground is about 11,000 Ohms.

AVERAGE TRANSFER CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

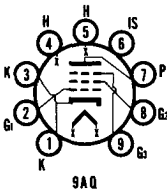


Color Television Type
IF AMPLIFIER

6EJ7/EF184
3EJ7/XF184, 4EJ7

Sharp Cutoff Pentode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9AQ
Outline
Maximum Diameter 0.875 In.
Maximum Seated Height 2.156 In.
Maximum Overall Height 2.406 In.



ELECTRICAL DATA
HEATER OPERATION

	3EJ7/XF184	4EJ7	6EJ7/EF184
Heater Voltage.....	3.4	4.4	6.3 Volts
Heater Current.....	600	450	300 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak.....			150 Volts
Heater Positive with Respect to Cathode			
Total DC and Peak.....			150 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)		
Grid No. 1 to Plate (Max.).....		0.005 Pf
Input: g1 to (h + k + g2 + g3 + IS).....		10 Pf
Output: p to (h + k + g2 + g3 + IS).....		3 Pf
RATINGS (Design Maximum Rating System)		
Plate Voltage with Ib = 0 Ma (Max.)		550 Volts
Plate Voltage (Max.).....		275 Volts
Grid No. 2 Voltage with Ic2 = 0 Ma (Max.)		550 Volts
Grid No. 2 Voltage (Max.)		275 Volts
Plate Dissipation (Max.)		2.8 Watts
Grid No. 2 Dissipation (Max.)		1.0 Watt
Cathode Current (Max.)		27 Ma
Grid No. 1 Circuit Resistance (Max.)		1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION		
Class A1 Amplifier		
Plate Voltage		200 Volts
Grid No. 3 Voltage		0 Volt