

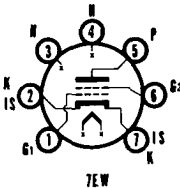
6EV5

2EV5, 3EV5

VHF AMPLIFIER

Sharp Cutoff Tetrode

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



ELECTRICAL DATA
HEATER OPERATION

	2EV5	3EV5	6EV5
Heater Voltage.....	2.4	2.9	6.3 Volts
Heater Current.....	600	450	200 Ma
Heater Warm-up Time.....	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			100 Volts
Total DC and Peak.....			
Heater Positive with Respect to Cathode			
DC.....			50 Volts
Total DC and Peak.....			100 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽¹⁾

Grid No. 1 to Plate (Max.).....	0.035 Pf
Input.....	4.5 Pf
Output.....	2.9 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.).....	275 Volts
Grid No. 2 Supply Voltage (Max.).....	180 Volts
Grid No. 2 Voltage.....	See Rating Chart (Gen. Info. Sec.)
Plate Dissipation (Max.).....	3.25 Watts
Grid No. 2 Dissipation (Max.).....	0.2 Watt
Positive Grid No. 1 Voltage (Max.).....	0 Volt
Cathode Current (Max.).....	20 Ma
Grid Circuit Resistance (Max.).....	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage.....	250 Volts
Grid No. 2 Voltage.....	80 Volts
Grid No. 1 Voltage.....	-1 Volt
Plate Current.....	11.5 Ma
Grid No. 2 Current.....	0.9 Ma
Transconductance.....	8800 μmhos
Plate Resistance.....	0.150 Megohm
E _{c1} for G _m = 100 μmhos (Approx.).....	-4.5 Volts

NOTE:

(1) Shield No. 316 connected to cathode.

6EW6

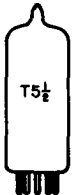
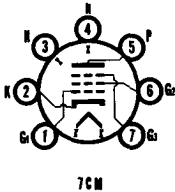
4EW6, 5EW6, 15EW6

Color Television Type

IF AMPLIFIER

Sharp Cutoff Pentode

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



ELECTRICAL DATA HEATER OPERATION

	15EW6	5EW6	4EW6	6EW6
Heater Voltage.....	15.0	5.6	4.2	6.3 Volts
Heater Current	150	450	600	400 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
Grid No. 1 to Plate (Max.).....	0.03	0.04 Pf
Input: g1 to (h + k + g2 + g3 + IS).....	10.0	10.0 Pf
Output: p to (h + k + g2 + g3 + IS).....	3.4	2.4 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	330 Volts
Grid No. 2 Supply Voltage (Max.)	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Positive Grid No. 1 Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	3.1 Watts
Grid No. 2 Dissipation (Max.)	0.65 Watts

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Voltage	125 Volts
Grid No. 3	Tied to Cathode
Grid No. 2 Voltage	125 Volts
Cathode Bias Resistor	56 Ohms
Plate Current	11 Ma
Grid No. 2 Current	3.2 Ma
Transconductance	14,000 μ mhos
Plate Resistance (Approx.)	0.2 Megohm
Grid No. 1 Voltage for Ib = 20 μ a (Approx.)	-3.5 Volts

NOTE:

(1) Shield No. 316 tied to cathode.

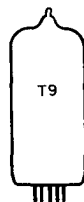
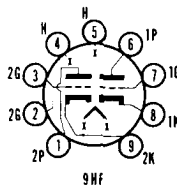
VERTICAL DEFLECTION OSCILLATOR and AMPLIFIER

6EW7

10EW7, 15EW7,
19EW7, 20EW7

Dissimilar Double Triode

Construction	9T-9
Base	Button 9 Pin, E9-68
Basing ⁽¹⁾	9HF
Outline	9-70
Maximum Diameter	1.188 In.
Maximum Seated Height	2.620 In.
Maximum Overall Height	2.930 In.



ELECTRICAL DATA HEATER OPERATION

	20EW7	19EW7	15EW7	10EW7	6EW7
Heater Voltage.....	20.5	18.9	14.8	9.7	6.3 Volts
Heater Current	300	300	450	600	900 Ma
Heater Warm-up Time	11	11	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 (Unshielded)

	Section ⁽¹⁾ No. 1	Section ⁽¹⁾ No. 2
Grid to Plate	4.2	9.0 Pf
Input: g to (h + k)	2.2	7.0 Pf
Output: p to (h + k)	0.4	1.2 Pf