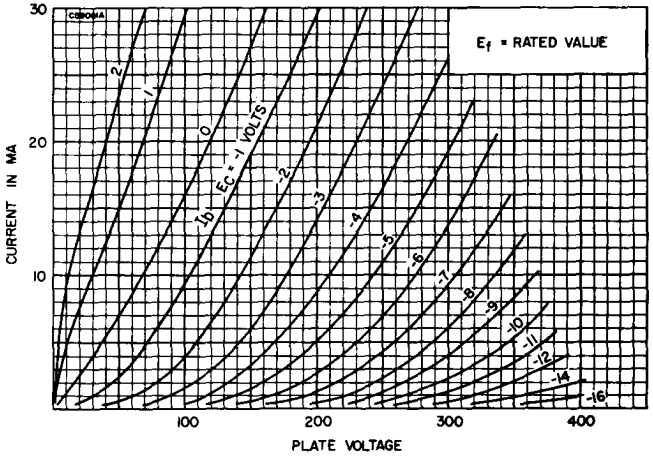
AVERAGE PLATE CHARACTERISTICS
(Triode Section)



RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	2.5	3.1 Watts
Grid No. 2 Dissipation (Max.)	—	0.55 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt

CHARACTERISTICS AND TYPICAL OPERATION

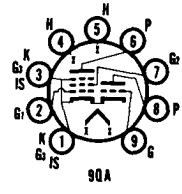
	Triode Section	Pentode Section
Class A1 Amplifier		
Plate Voltage	150	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	—	-1.0 Volts
Cathode Bias Resistor	56	— Ohms
Plate Current	18	12 Ma
Grid No. 2 Current	—	4 Ma
Transconductance	8500	6400 μmhos
Amplification Factor	40	—
Plate Resistance (Approx.)	5000	200,000 Ohms
Ec1 for Ib = 10 μa (Approx.)	-12	-9 Volts

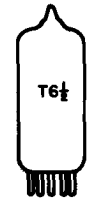
6HD7

VHF OSCILLATOR and MIXER

Medium Mu Triode and Sharp Cutoff Pentode

Construction .....Miniature T-6½
Base .....Button 9 Pin, E9-1
Basing 9QA
Outline 6-2
Maximum Diameter .....0.875 In.
Maximum Seated Height .....1.937 In.
Maximum Overall Height .....2.187 In.





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 (Shielded)(1)

Triode:	
Grid to Plate	1.35 Pf
Input	2.45 Pf
Output	0.8 Pf
Pentode:	
Grid 1 to Plate	0.008 Pf
Input	4.6 Pf
Output	1.8 Pf
Grid 1 to Grid 2	1.3 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	275	275 Volts
Grid 2 Supply Voltage (Max.)	—	275 Volts
Grid 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	1.5	2.2 Watts
Grid 2 Dissipation (Max.)	—	0.45 Watts
Positive Grid 1 Voltage (Max.)	0	0 Volts
Negative Grid 1 Voltage (Max.)	40	40 Volts
Cathode Current (Max.)	20	20 Ma
Grid 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Cathode Resistor Bias	1.0	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Triode Unit:		
Plate Voltage	100	125 Volts
Grid Voltage	—	-1.0 Volt
Grid Circuit Resistance	0.1	— Megohm
Amplification Factor	40	—
Plate Resistance	4880	— Ohms
Transconductance	8200	9500 μmhos
Plate Current	14	19 Ma
Grid Cutoff Voltage(2)	-5.0	-6.0 Volts
Pentode Unit:		
Plate Voltage	120	125 Volts
Grid 2 Voltage	90	125 Volts
Grid 1 Voltage	—	-1.0 Volt
Grid 1 Circuit Resistance	0.1	— Megohm
Plate Resistance	70,000	— Ohms
Transconductance	8000	7000 μmhos
Plate Current	10.5	12 Ma
Grid 2 Current	3.0	3.5 Ma
Grid 1 Cutoff Voltage(2)	-2.5	-6.5 Volts

NOTES:
(1) With external shield connected to cathode.
(2) For a plate current of 20 μa.

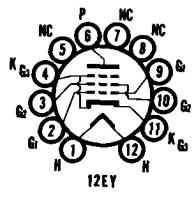
Color Television Type

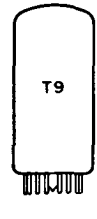
VERTICAL DEFLECTION AMPLIFIER

6HE5

Beam Power Pentode

Construction	Compactron T-9
Base	Button 12 Pin, E12-70
Basing	12EY
Outline	9-60
Maximum Diameter	1.188 In.
Maximum Seated Height	2.500 In.
Maximum Overall Height	2.875 In.





ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	800 Ma