

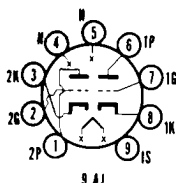
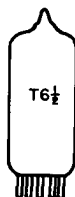
Color Television Type
RF AMPLIFIER AND MIXER

6AQ8/ECC85

9AQ8

High Mu Twin Triode

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

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

	9AQ8	6AQ8/ECC85
Heater Voltage.....	9.0	6.3 Volts
Heater Current.....	300	435 Ma
Maximum Heater-Cathode Voltage.....	90	90 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Section No. 1	Section No. 2
Grid to Plate	1.5	1.5 Pf
Input: g to (k + h + IS)	3.0	3.0 Pf
Output: p to (k + h + IS)	1.2	1.2 Pf
RATINGS (Design Center Rating System) (Each Section)		
Plate Voltage (Max.)		300 Volts
Plate Dissipation (Max.)		2.5 Watts
Cathode Current (Max.)		15 Ma
Negative Grid Voltage (Max.)		100 Volts
Grid Circuit Resistance (Max.)		1.0 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

	R-F Amp	Autodyne Osc/Mixer
Plate Supply Voltage.....	— 250	250 Volts
Plate Dropping Resistor	— 1800	12,000 Ohms
Plate Voltage	250 230	— Volts
Grid Voltage	-2.3 -2.0	— Volts
Cathode Resistor	— 200	— Ohms
Grid Leak Resistor	— —	1.0 Megohms
Oscillator Voltage (RMS).....	— —	3 Volts
Plate Current	10 10	5.2 Ma
Transconductance	5900 6000	— μmhos
Conversion Transconductance	— —	2300 μmhos
Amplification Factor	57 —	—
Plate Resistance.....	— 9700	22,000 Ohms
Input Resistance at 100 MHz	— 6000	15,000 Ohms
Equivalent Noise Resistance	— 500	— Ohms

NOTES:

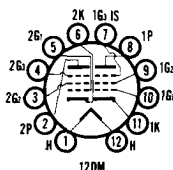
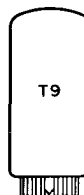
- (1) Section No. 1 connects to Pins 6, 7, and 8.
- (2) An internal shield is connected to Pin No. 9 to provide isolation between the two sections.

IF AMPLIFIER**6AR11**

8AR11, 11AR11

Twin Pentode

Construction..... Compactron T-9
 Base Button 12 Pin, E12-70
 Basing 12DM
 Outline 9-58
 Maximum Diameter 1.188 In.
 Maximum Seated Height 2.000 In.
 Maximum Overall Height 2.375 In.



ELECTRICAL DATA
HEATER OPERATION

	11AR11	8AR11	6AR11
Heater Voltage.....	11.2	8.4	6.3 Volts
Heater Current	450	600	800 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⁾

Section 1

Grid-Number 1 to Plate	0.026 Pf
Input: 1g1 to (1k + 1g2 + 1g3 + h + IS).....	10 Pf
Output: 1p to (1k + 1g2 + 1g3 + h + IS).....	2.8 Pf

Section 2

Grid-Number 1 to Plate	0.026 Pf
Input: 2g1 to (2k + 2g2 + 2g3 + 1g3 + h + IS)	10 Pf
Output: 2p to (2k + 2g2 + 2g3 + 1g3 + h + IS)	3.0 Pf
Plate to Plate (Max.).....	0.016 Pf
Grid-Number 1, Section 1 to Plate, Section 2:(Max.)	0.002 Pf
Grid-Number 1, Section 2 to Plate, Section 1: (Max.)	0.004 Pf

RATINGS (Design Maximum Rating System) (Each Section)

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

CHARACTERISTICS AND TYPICAL OPERATION (Each Section)

Plate Voltage	125 Volts
Suppressor	Connected to Cathode at Socket
Screen Voltage.....	125 Volts
Cathode-Bias Resistor	56 Ohms
Plate Resistance (Approx.)	0.2 Megohms
Transconductance	10,500 μ mhos
Plate Current	11 Ma
Screen Current	3.5 Ma
Grid No. 1 Voltage (Approx.)	
Gm = 50 μ mhos	-15 Volts

NOTE:

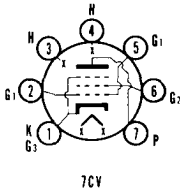
(1) With external shield (EIA 309) connected to cathode of section under test.

6AS5

AUDIO POWER AMPLIFIER

Beam Pentode

Construction	Miniature T-5½
Base	Button 7 Pin
Biasing	7CV
Outline	5-3
Maximum Diameter	0.750 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.



ELECTRICAL DATA
HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	800 Ma
Maximum Heater-Cathode Voltage	100 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate	0.6 Pf
Input	12 Pf
Output	9.0 Pf