

9A8/PCF80

8A8, 17A8

Color Television Type

VHF OSCILLATOR and MIXER**Triode and Pentode**

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

**ELECTRICAL DATA
HEATER OPERATION**

	17A8	8A8	9A8/PCF80
Heater Voltage.....	16.8	8.4	9.0 Volts
Heater Current.....	150	300	300 Ma
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak.....			100 Volts
Heater Positive with Respect to Cathode			
DC.....			120 Volts
Total DC and Peak.....			200 Volts

DIRECT INTERELECTRODE CAPACITANCES**Pentode Section**

Input Capacitance.....	5.5 Pf
Output Capacitance.....	3.8 Pf
Plate to Grid No. 1 (Max.).....	0.025 Pf

Triode Section

Input Capacitance.....	2.5 Pf
Output Capacitance.....	1.8 Pf
Plate to Grid.....	1.5 Pf

Between Pentode and Triode Sections

Pentode Plate to Triode Plate (Max.).....	0.07 Pf
Pentode Plate to Triode Grid (Max.).....	0.02 Pf
Pentode Grid to Triode Plate (Max.).....	0.16 Pf

RATINGS (Design Center Rating System)**Pentode Section**

Plate Voltage (Max.).....	250 Volts
Plate Voltage (without current) (Max.).....	550 Volts
Plate Dissipation (Max.).....	1.7 Watts
Grid No. 2 Voltage at a Cathode Current of 14 Ma (Max.).....	175 Volts
Grid No. 2 Voltage at a Cathode Current less than 10 Ma (Max.).....	200 Volts
Grid No. 2 Dissipation at a Plate Dissipation more than 1.2 Watts (Max.).....	0.5 Watt
Grid No. 2 Dissipation at a Plate Dissipation less than 1.2 Watts (Max.).....	0.75 Watt
Grid No. 1 Circuit Resistance with Automatic Bias (Max.).....	1 Megohm
Grid No. 1 Circuit Resistance with Fixed Bias (Max.).....	0.5 Megohm
Cathode Current (Max.).....	14 Ma

Triode Section

Plate Voltage (Max.).....	250 Volts
Plate Voltage (without current) (Max.).....	550 Volts
Plate Dissipation (Max.).....	1.5 Watts
Grid Circuit Resistance (Max.).....	0.5 Megohm
Cathode Current (Max.).....	14 Ma

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage.....	170 Volts
Grid No. 2 Voltage.....	170 Volts
Grid No. 1 Bias.....	-2 Volts
Plate Current.....	10 Ma
Grid No. 2 Current.....	2.8 Ma
Transconductance.....	6200 μ mhos
Plate Resistance.....	0.4 Megohm
Amplification Factor of Grid No. 2 with Respect to Grid No. 1.....	47
Input Resistance at 50 MHz.....	10,000 Ohms
Equivalent Noise Resistance.....	1500 Ohms

Triode Section

Plate Voltage.....	100 Volts
Grid Voltage.....	-2 Volts
Plate Current.....	14 Ma
Transconductance.....	5000 μ mhos
Amplification Factor.....	20

