9A8/PCF80

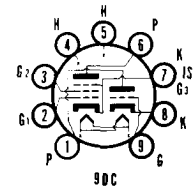
8A8, 17A8

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 μmhos
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 μmhos
Amplification Factor	20