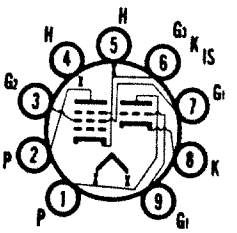
7199

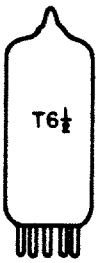
PREAMPLIFIER (P) PHASE INVERTER (T)

Medium Mu Triode and Sharp Cutoff Pentode

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



9JT



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	450 Ma
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)

Triode Section	
Grid to Plate	2.0 Pf
Input: g to (h + k)	2.3 Pf
Output: p to (h + k)	0.3 Pf
Pentode Section	
Grid No. 1 to Plate (Max.)	0.06 Pf
Input: g1 to (h + k + g2 + g3 + IS)	5.0 Pf
Output: p to (h + k + g2 + g3 + IS)	2.0 Pf

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.)	
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	2.4	3.0 Watts
Grid No. 2 Dissipation (Max.)	—	0.6 Watt
Grid Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Cathode Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section	
Plate Voltage	215	100	220 Volts
Grid No. 2 Voltage	—	50	130 Volts
Grid No. 1 Voltage	8.5	—	— Volts
Cathode Bias Resistor	—	1000	62 Ohms
Plate Current	9.0	1.1	12.5 Ma
Grid No. 2 Current	—	0.35	3.5 Ma
Transconductance	2100	1500	7000 μmhos
Amplification Factor	17	—	—
Plate Resistance	0.0081	1.0	0.4 Megohm
Ec1 for Ib = 10 μa (Approx.)	40	4	— Volts

Equivalent Noise and Hum Voltage (Referenced to Grid)

	Triode Section(1)	Pentode Section(2)
Average Value	10	35 μ Volts rms
Maximum Value	150	100 μ Volts rms

NOTES:

(1) Measured under the following conditions: Ef = 6.3 Vac; center-tap of heater transformer grounded; Ebb = 250 Vdc; R_L = 0.1 Megohm; Rk = 1500 ohms; Rg = 50,000 ohms; F = 25 to 10,000 Hertz.

(2) Measured under the following conditions: Ef = 6.3 Vac; center-tap of heater transformer grounded; Ebb = 250 Vdc; RL = 0.1 Megohm; Ecc2 = 250 Vdc; Rg2 = 330,000 ohms; Eg2 = 0.22 μf; Rk = 1200 ohms; Rg1 = 50,000 ohms; F = 25 to 10,000 Hertz.