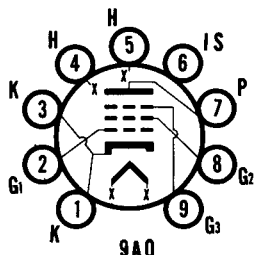


SYLVANIA TYPES 6EH7 4EH7 3EH7



MECHANICAL DATA

Bulb.....	T-6 1/2
Base.....	E9-1, Miniature Button 9-Pin
Outline.....	
Max. Seated Height.....	2 5/8 Inches
Basing.....	9AQ
Cathode.....	Coated Unipotential
Mounting Position.....	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Operation	3EH7 Series	4EH7 Series	6EH7 Parallel
Heater Voltage.....	3.4	4.4	6.3 Volts
Heater Current.....	600	450	300 Ma
Heater Warm-up Time ²	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total D C and Peak.....			150 Volts
Heater Positive with Respect to Cathode			
Total D C and Peak.....			150 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate.....	.005 μ f Max.
Input: g1 to (h+k+g2+g3+I.S.).....	9 μ f
Output: p to (h+k+g2+g3+I.S.).....	3 μ f

RATINGS (Design Center Values)

Plate Voltage with Ib = 0 Ma.....	550 Volts Max.
Plate Voltage.....	250 Volts Max.
Grid No. 2 Voltage with Ic2 = 0 Ma.....	550 Volts Max.
Grid No. 2 Voltage.....	250 Volts Max.
Plate Dissipation.....	2.5 Watts Max.
Grid No. 2 Dissipation.....	0.65 Watts Max.
Cathode Current.....	20 Ma Max.
Grid No. 1 Circuit Resistance.....	1.0 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION

Characteristics	
Plate Voltage.....	200 Volts
Grid No. 3 Voltage.....	0 Volts
Grid No. 2 Voltage.....	90 Volts
Grid No. 1 Voltage.....	-2 Volts
Plate Current.....	12 Ma
Grid No. 2 Current.....	4.5 Ma
Transconductance.....	12,500 μ mhos
Plate Resistance (approx.).....	0.5 Megohm
Grid No. 1 Impedance at 40 MC/S.....	30,000 Ohms ¹

CHARACTERISTICS AND TYPICAL OPERATION (Continued)

Typical Operation	
Plate Voltage.....	200 Volts
Grid No. 3 Voltage.....	0 Volts
Grid No. 2 Supply Voltage.....	200 Volts
Grid No. 2 Series Resistor.....	22,000 Ohms
Grid No. 1 Voltage.....	-19.5 -9.5 -6.5
Transconductance.....	125 625 1250
Ec1 for a Cross Mod. Factor of 1%.....	450 160 100
	— MV (RMS)

NOTE:

1. Input damping of tube and typical ceramic socket with both cathode leads returned directly to ground is about 11,000 ohms.

APPLICATION

The Sylvania Types 3EH7, 4EH7 and 6EH7 are T-6 1/2 high transconductance semi-remote cutoff pentodes designed for service as VHF IF amplifiers. Types 3EH7 and 4EH7 have controlled heater warm-up time for series string operation.

AVERAGE TRANSFER CHARACTERISTICS

