



ADVANCE DATA

MECHANICAL DATA

Bulb	T-6 $\frac{1}{2}$
Base	E9-1, Miniature Button, 9-Pin
Outline	6-2
Basing	9AE
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

Heater Operation	Series	Parallel	
Heater Voltage	6.3	6.3 <sup>1</sup>	Volts
Heater Current	600 <sup>1</sup>	600	Ma
Heater Warm-up Time <sup>2</sup>	11	-	Seconds

Ratings (Design Maximum Values)

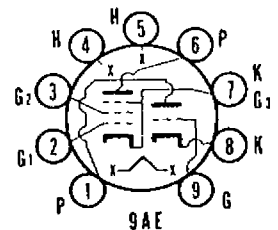
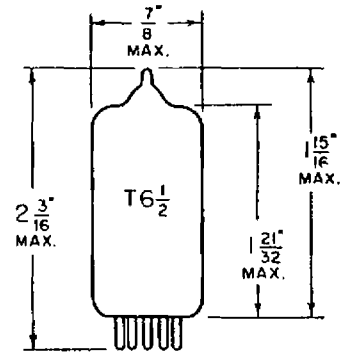
	Min.-Max.	Min.-Max.	
Heater Voltage <sup>3</sup>	-	5.7-6.9	Volts
Heater Current <sup>3</sup>	560-640	-	Ma
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak	200	200	Volts
Heater Positive with Respect to Cathode			
DC	100	100	Volts
Total DC and Peak	200	200	Volts

DIRECT INTERELECTRODE CAPACITANCES

Triode Section	Shielded	Unshielded	
Grid to Plate	2.8	2.8	$\mu\text{f}$
Input: g to (h+k+Pk, g <sub>3</sub> , I.S.)	3.0	2.8	$\mu\text{f}$
Output: p to (h+k+Pk, g <sub>3</sub> , I.S.)	2.4	1.6	$\mu\text{f}$
Pentode Section			
Grid No. 1 to Plate	.025	.03	$\mu\text{f}$ Max.
Input: g <sub>1</sub> to (h+k, g <sub>3</sub> , I.S.+g <sub>2</sub> )	7.5	7.5	$\mu\text{f}$
Output: p to (h+k, g <sub>3</sub> , I.S.+g <sub>2</sub> )	3.0	2.3	$\mu\text{f}$

QUICK REFERENCE DATA

The Sylvania Type 6HL8 contains a medium mu triode and high Gm pentode in a T-6 $\frac{1}{2}$  bulb. The triode is designed for sync separator, voltage amplifier or general purpose use. The pentode can be used as a video IF amp., AGC amp. and reactance tube.



SYLVANIA  
ELECTRONIC TUBES

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RECEIVING TUBE  
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6HL8

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RATINGS (Design Maximum Values)

	Triode Section	Pentode Section	
Plate Voltage	330	330	Volts Max.
Grid No. 2 Supply Voltage		330	Volts Max.
Grid No. 2 Voltage	See Rating Chart		
Positive Grid No. 1 Voltage		0	Volts Max.
Plate Dissipation	2.5	2.5	Watts Max.
Grid No. 2 Dissipation		0.55	Watt Max.
Grid No. 1 Circuit Resistance			
Fixed Bias	1.0	-	Megohm
Self Bias	1.0	-	Megohms

AVERAGE CHARACTERISTICS

	Triode Section	Pentode Section	
Plate Voltage	125	125	Volts
Grid No. 2 Voltage		125	Volts
Grid No. 1 Voltage	-1.0	-1.0	Volts
Transconductance	7000	10,000	μmhos
Plate Current	12.5	12.0	Ma
Grid No. 2 Current		4.5	Ma
Plate Resistance (Approx.)	5000	150,000	Ohms
Amplification Factor	40		
E <sub>c1</sub> for I <sub>b</sub> = 20 μa (approx.)	-	-7	Volts

NOTES:

1. For series/parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater current/voltage.
2. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
3. Heater voltage supply variations shall be restricted to maintain heater voltage/current within the specified values.