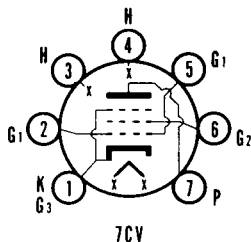


**SYLVANIA TYPE**    **6EH5**  
**12EH5**  
**25EH5**  
**50EH5**



### MECHANICAL DATA

Bulb .....	T-5 $\frac{1}{2}$
Base .....	E7-1, Miniature Button 7-Pin
Outline .....	5-3
Basing .....	7CV
Cathode .....	Coated Unipotential
Mounting Position .....	Any

### ELECTRICAL DATA

#### HEATER CHARACTERISTICS

	6EH5	12EH5	25EH5	50EH5
Heater Voltage .....	6.3	12.6	25	50 Volts
Heater Current .....	1200	600	300	150 Ma
Heater Warm-up Time <sup>1</sup> .....	...	11	...	... Seconds
Heater-Cathode Voltage (Design Center Values)				
Heater Negative with Respect to Cathode				
Total D C and Peak .....	200	300	200	200 Volts Max.
Heater Positive with Respect to Cathode				
D C .....	100	100	100	100 Volts Max.
Total D C and Peak .....	200	200	200	200 Volts Max.

#### DIRECT INTERELECTRODES CAPACITANCES (Unshielded)

Grid No. 1 to Plate .....	0.65 $\mu\mu\text{f}$
Input .....	17 $\mu\mu\text{f}$
Output .....	9 $\mu\mu\text{f}$

#### MAXIMUM RATINGS (Design Center Values)

##### Class A<sub>1</sub> Amplifier

Plate Voltage .....	135 Volts
Grid No. 2 Voltage .....	117 Volts
Grid No. 1 Voltage .....	0 Volts
Plate Dissipation .....	5 Watts
Grid No. 2 Dissipation .....	1.75 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias .....	0.1 Megohm
Cathode Bias .....	0.5 Megohm

#### CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage .....	110 Volts
Grid No. 2 Voltage .....	115 Volts
Cathode Resistor .....	62 Ohms
Peak AF Grid No. 1 Voltage .....	3 Volts
Zero-Signal Plate Current .....	42 Ma
Maximum Signal Plate Current .....	42 Ma
Zero Signal Grid No. 2 Current .....	11.5 Ma
Maximum Signal Grid No. 2 Current .....	14.5 Ma
Transconductance .....	14,600 $\mu\text{mhos}$
Plate Resistance (approx.) .....	11,000 Ohms
Load Resistance .....	3000 Ohms
Maximum Signal Power Output .....	1.4 Watts
Total Harmonic Distortion .....	7 Percent

#### NOTE:

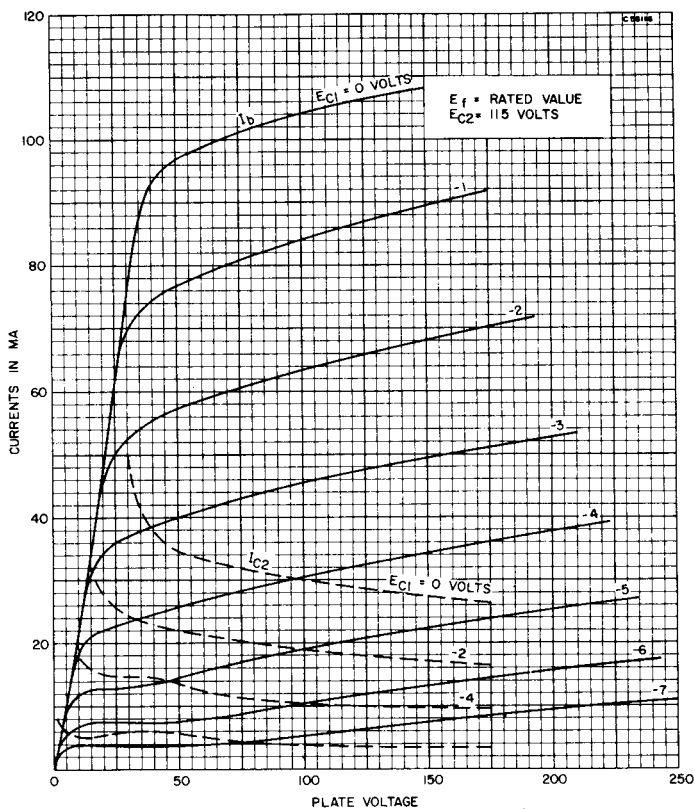
1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.

### APPLICATION

The Sylvania Types 6EH5, 12EH5, 25EH5 and 50EH5 are miniature power pentodes designed for service as audio power amplifiers. Type 12EH5 differs from the others in that it is controlled for heater warm-up time and has a higher heater-cathode voltage rating.

# 6EH5, 12EH5, 25EH5, 50EH5 (Cont'd)

## AVERAGE PLATE CHARACTERISTICS



## OPERATION CHARACTERISTICS

