

MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-2
Basing	9A
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6AX7	12AX7
Heater Voltage Series/Parallel . . .	6.3/3.15	12.6/6.3 Volts
Heater Current Series/Parallel . . .	300/600	150/300 Ma
Heater Warm-up Time ^{1 & 4}	11	Seconds
Heater-Cathode Voltage (Design Center Values)		
Heater Negative with Respect to Cathode		
Total DC and Peak	200	200 Volts Max.
Heater Positive with Respect to Cathode		
DC	100	100 Volts Max.
Total DC and Peak	200	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES

	Section 1 ²		Section 2 ²	
	Shielded ³	Unshielded	Shielded ³	Unshielded
Grid to Plate	1.7	1.7	1.7	1.7 μmf
Input (g to h+k)	1.8	1.6	1.8	1.6 μmf
Output (p to h+k)	1.9	0.46	1.9	0.34 μmf

RATINGS (Design Center Values) Each Section

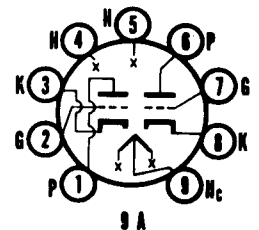
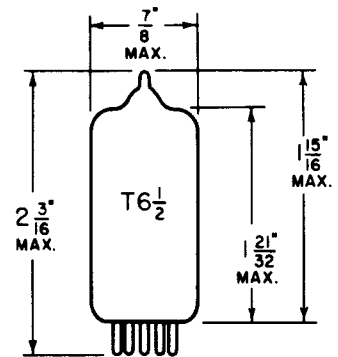
Plate Voltage	300 Volts Max.
Plate Dissipation	1.0 Watt Max.
Positive DC Grid Voltage	0 Volts Max.
Negative DC Grid Voltage	-50 Volts Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A ₁ Amplifier — Each Section			
Plate Voltage	100	250 Volts	
Grid Voltage	-1	-2 Volts	
Plate Current	0.5	1.2 Ma	
Plate Resistance	80,000	62,500 Ohms	
Transconductance	1250	1600 μmhos	
Amplification Factor	100	100	

QUICK REFERENCE DATA

The Sylvania Type 12AX7 is a miniature high-μ twin triode having separate cathodes. It is designed for service as an audio voltage amplifier or phase inverter. The center tapped heater of the Type 12AX7 permits operation on 12.6 or 6.3 volts. The 12AX7 is identical to the 6AX7 except for heater characteristics. The 6AX7 employs a 600 Ma heater and controlled heater warm-up time for use in series string television receivers.



SYLVANIA ELECTRIC PRODUCTS INC.

**RADIO TUBE DIVISION
EMPORIUM, PA.**

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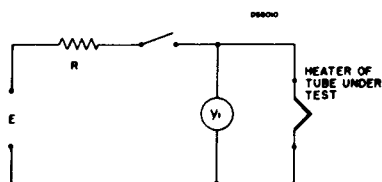
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NOTES:

1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (V_1). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test.*

For this type: $E = 12.5$ Volts, $R = 15.8$ Ohms, $V_1 = 2.5$ Volts.



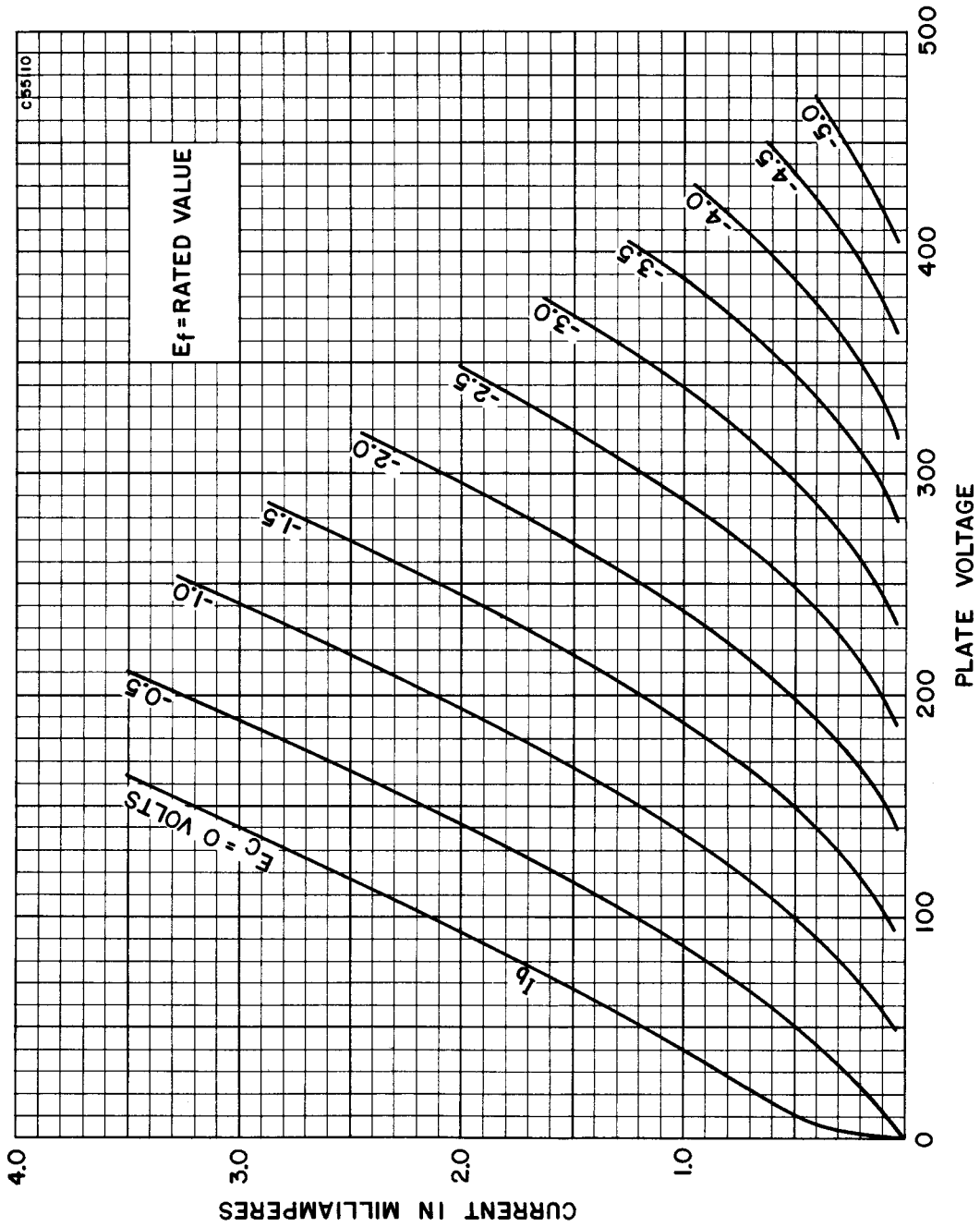
E — Applied Voltage, RMS or DC

R — Total Series Resistance

*V_1 — Heater Test Voltage, RMS or DC
(80% Rated Heater Voltage)*

2. *Section No. 1 connects to Pins 6, 7 and 8.
Section No. 2 connects to Pins 1, 2 and 3.*
3. *External shield No. 315 connected to cathode of section under test.*
4. *Controlled Heater Warm-up Time applies to parallel connection only.*

AVERAGE PLATE CHARACTERISTICS
EACH SECTION



AVERAGE TRANSFER CHARACTERISTICS
EACH SECTION

