MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS

	4BC8	6BC8	
Heater Voltage	4.2	6.3	Volts
Heater Current	600	400	Ma
Heater Warm-up Time[1]	11		Seconds
Heater-Cathode Voltage (Design Center Values)			
Heater Negative with Respect to Cathode[3]			
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 (Shielded)[2]

	Section 1	Section 2	
Grid to Plate	1.4	1.4	μμf
Input	2.5	2.5	μμf
Output	1.3	1.3	μμf
Heater to Cathode	2.3	2.3	μμf
Plate Section No. 1 to Plate Section No. 2	0.015		μμf Max.
Grid Section No. 1 to Grid Section No. 2	0.007		μμf Max.

RATINGS (Design Center Values — Each Section)

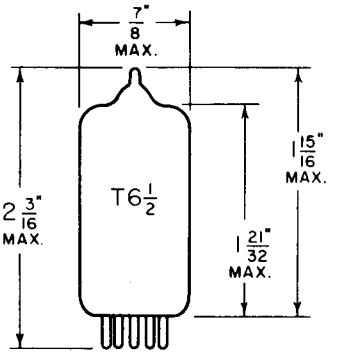
Plate Voltage[3]	250 Volts Max.
Plate Dissipation	2 Watts Max.
Cathode Current	20 Ma Max.
Grid Circuit Resistance	0.5 Megohm Max.

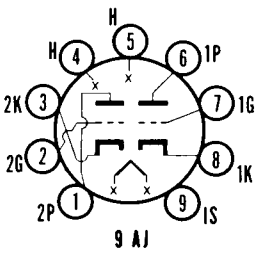
CHARACTERISTICS — Class A_1 Amplifier (Each Section)

Plate Voltage	150 Volts
Grid Voltage	0 Volts
Cathode Bias Resistor	220 Ohms
Plate Current	10 Ma
Transconductance	6200 μmhos
Amplification Factor	35
Grid Voltage for gm = 50 μmhos (approx.)	−13 Volts

QUICK REFERENCE DATA

The Sylvania Type 6BC8 is a miniature, medium mu, semi-remote cutoff twin triode intended for application as a vhf cascode amplifier in television receivers. The 4BC8 features a 600 Ma 4.2 volt heater and controlled heater warm-up time for service in television receivers employing a series heater string. It is otherwise identical to the Type 6BC8.





SYLVANIA ELECTRIC PRODUCTS INC.

RADIO TUBE DIVISION
EMPORIUM, PA.

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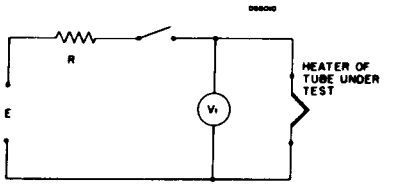
NOTES:

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 (V1). The conditions used in conjunction with the test circuit depend upon the rated voltage and current of the tube under test:*

   For this type: E = 16.8 Volts, R = 21.0 Ohms, V1 = 3.33 Volts.



E — Applied Voltage, R M S or D C

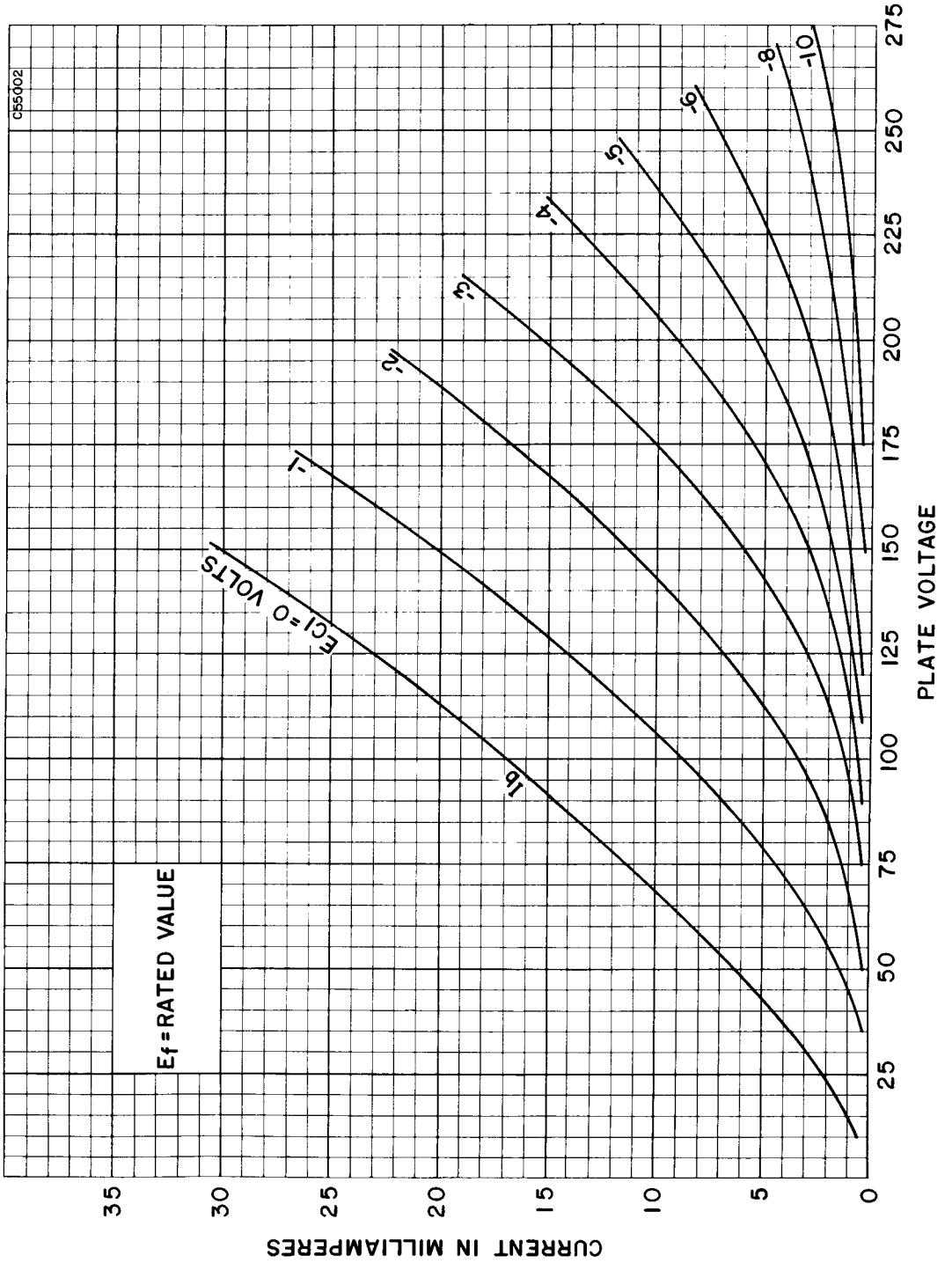
R — Total Series Resistance

V1 — Heater Test Voltage, R M S or D C (80% Rated Heater Voltage)

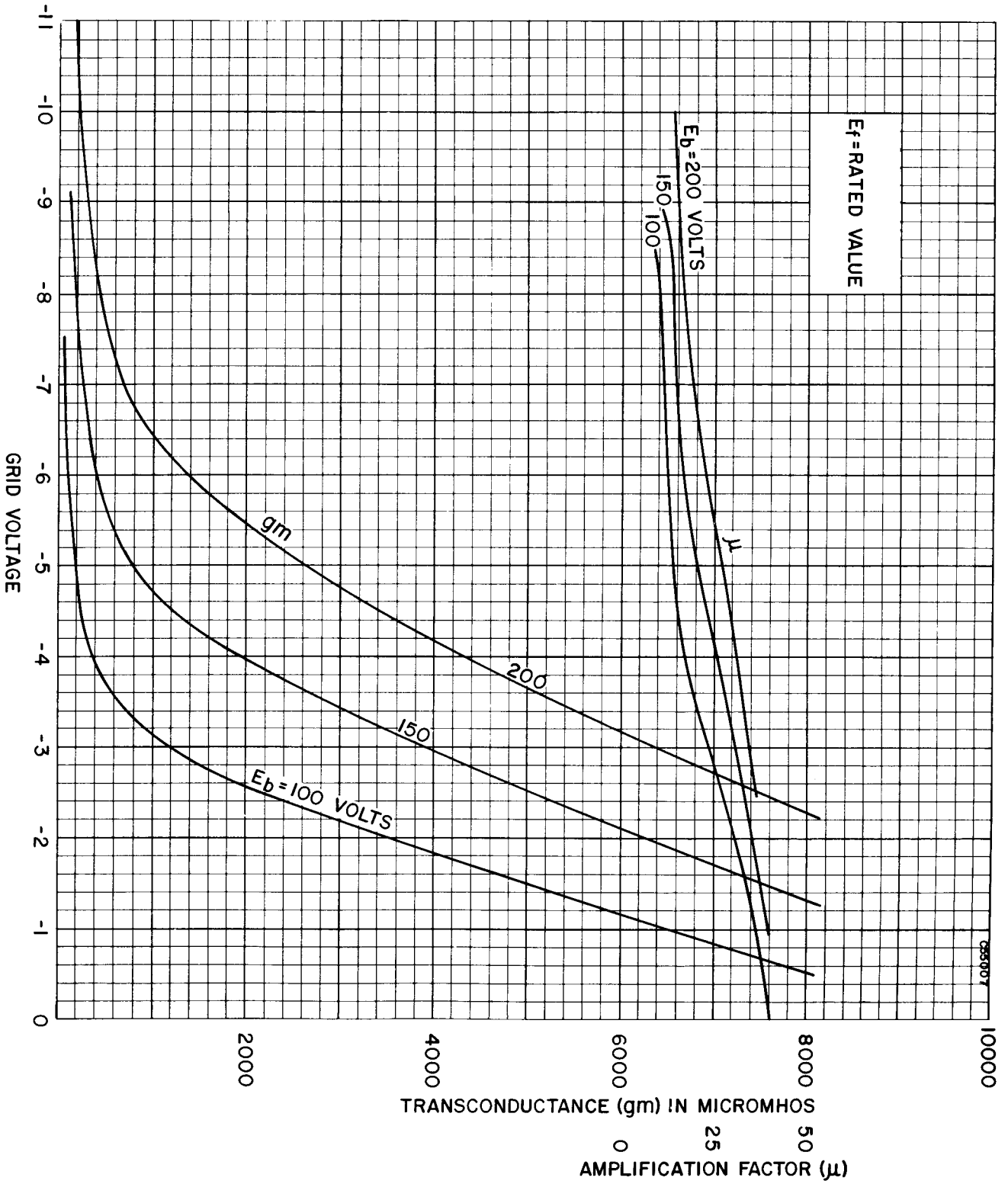
2. *Shield No. 315.*

3. *This rating may be as high as 300 volts maximum under cutoff conditions when the tube is used as a cascode amplifier and the two sections are connected in series.*

AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS