

MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS

	4CX7	6CX7
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		
Total DC and Peak ²	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)³

	Section No. 1	Section No. 2
Grid to Plate: (g to p)	1.2	μμf
Input: g to (h+k+e.s.)	2.4	μμf
Output: p to (h+k+e.s.)	1.3	μμf
Heater to Cathode: (h to k) ⁴	2.4	2.2 μμf
Plate to Cathode: (p to k)	0.17	0.17 μμf Max.
No. 2 Plate to No. 1 Plate and No. 1 Grid:		
No. 2 p to (No. 1 p+No. 1 g)	0.027	μμf Max.
Plate to Plate: (No. 1 p to No. 2 p)	0.017	μμf Max.
Grounded Grid Operation:		
Input: k to (g+i.s.+h+e.s.)		4.2 μμf
Output: p to (g+i.s.+h+e.s.)		1.7 μμf

RATINGS (Design Center Values — Each Section)

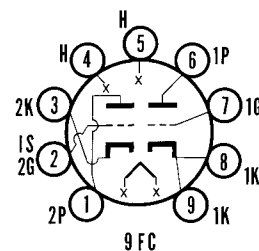
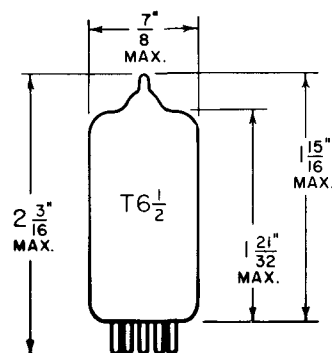
Plate Voltage ²	250 Volts Max.
Plate Dissipation	2 Watts Max.
Cathode Current	20 Ma Max.
Grid Circuit Resistance	0.5 Megohm Max.

CHARACTERISTICS — Class A₁ Amplifier (Each Section)

Plate Voltage	150 Volts
Grid Voltage	0 Volts
Cathode Bias Resistor	220 Ohms
Plate Current	9.0 Ma
Transconductance	6400 μmhos
Amplification Factor	39
Grid Voltage for I _b = 10 μa (approx.)	-10 Volts

QUICK REFERENCE DATA

The Sylvania Types 4CX7 and 6CX7 are miniature medium mu twin triodes designed for operation as cascode (vhf) amplifiers. The 4CX7 features a 600 ma heater and controlled heater warm-up time for service in television receivers employing a series heater string.



SYLVANIA ELECTRIC
PRODUCTS INC.

RADIO TUBE DIVISION
EMPORIUM, PA.

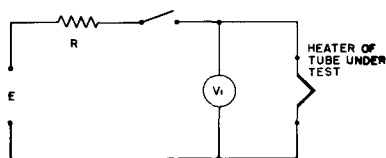
Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

JANUARY 1956

PAGE 1 OF 6

NOTES:

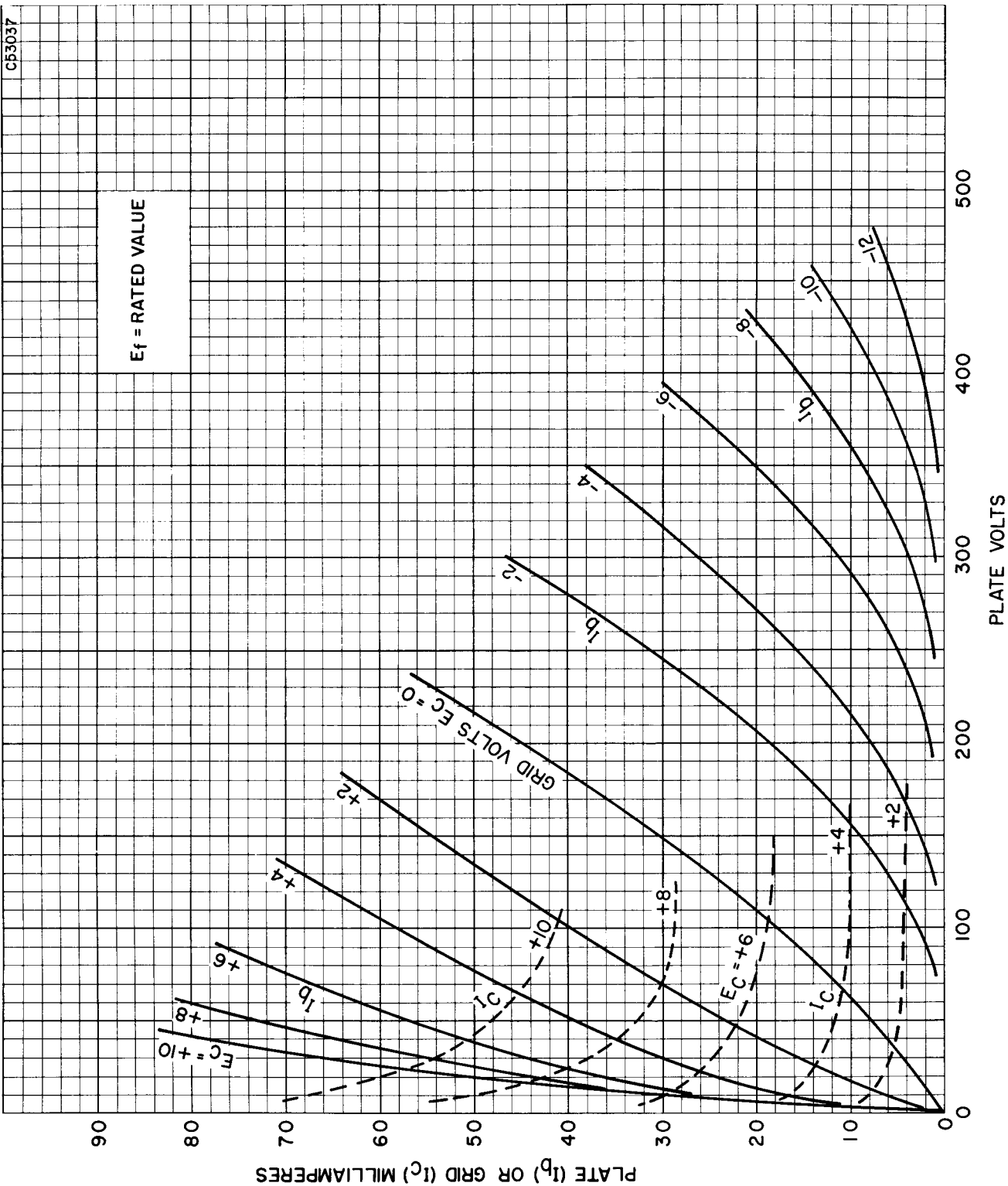
1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (V_1). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test. For this type: $E = 16.8$ Volts, $R = 21.0$ Ohms, $V_1 = 3.33$ Volts.*



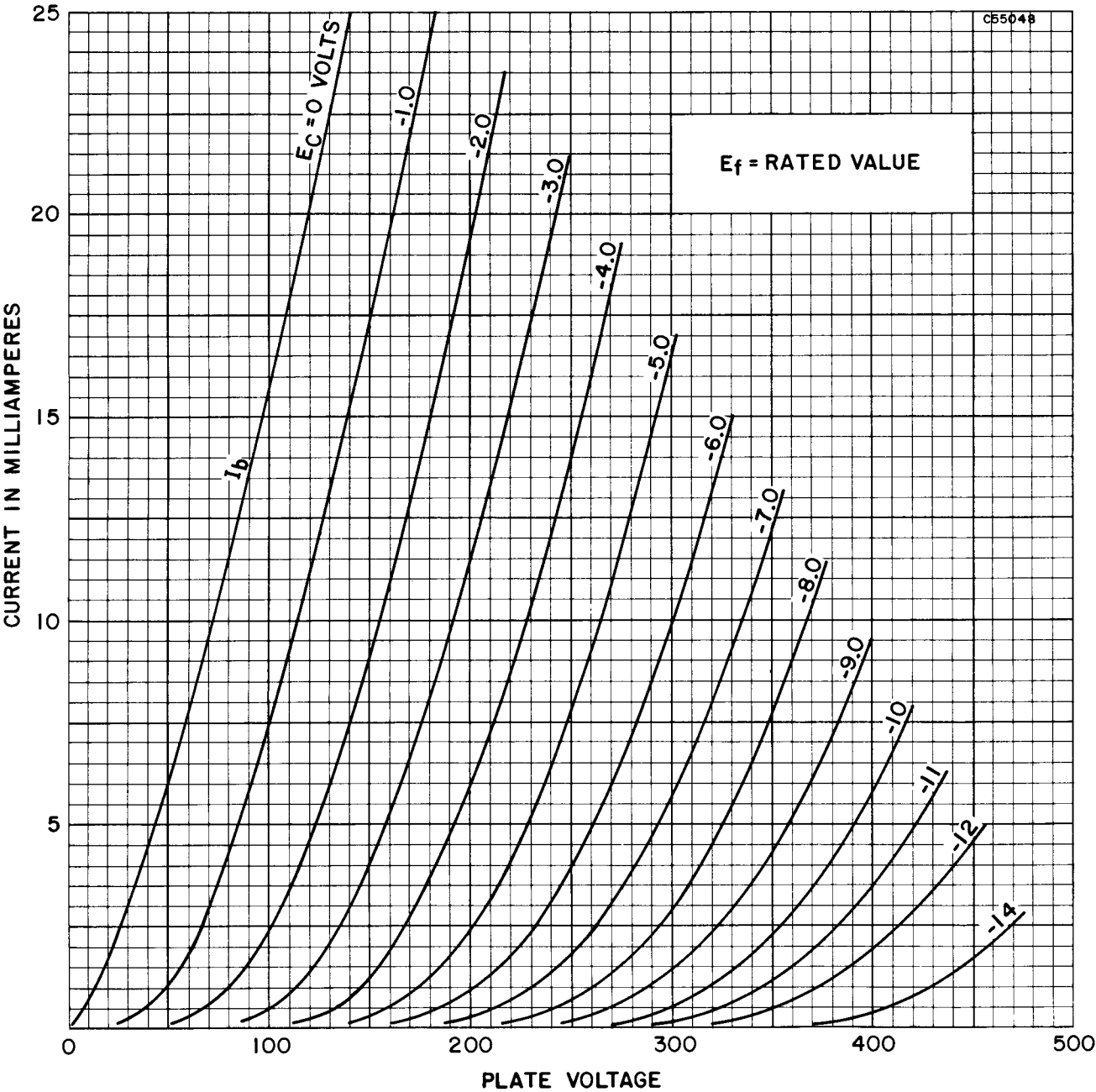
E — Applied Voltage, RMS or DC
 R — Total Series Resistance
 V_1 — Heater Test Voltage, RMS or DC
(80% Rated Heater Voltage)

2. *Under cutoff conditions when the tube is used as a cascode amplifier, this rating may be as high as 300 volts maximum.*
3. *Shield No. 315 connected to heater unless specified differently.*
4. *Shield No. 315 connected to ground.*

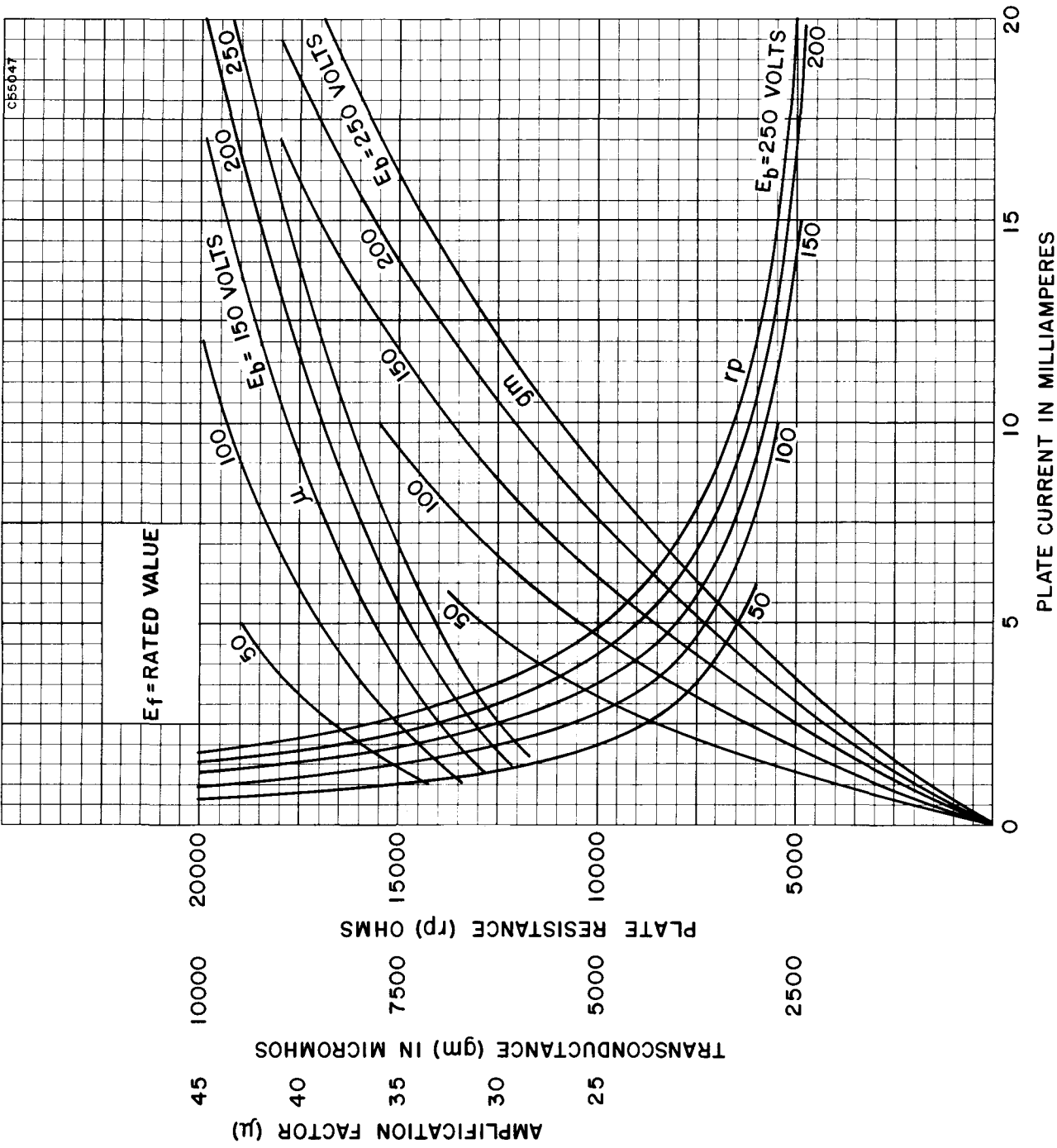
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

