

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)

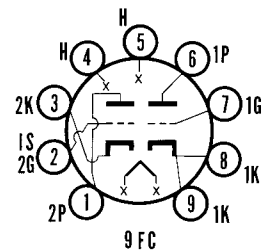
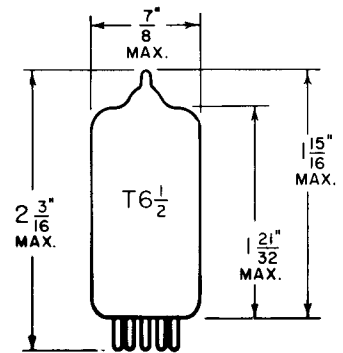
| | |
|--------------------------------------|-----------------|
| Plate Voltage ² | 250 Volts Max. |
| Plate Dissipation | 2 Watts Max. |
| Cathode Current | 20 Ma Max. |
| Grid Circuit Resistance | 0.5 Megohm Max. |

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.

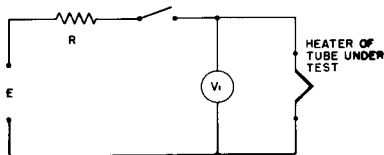
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JANUARY 1956

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NOTES:

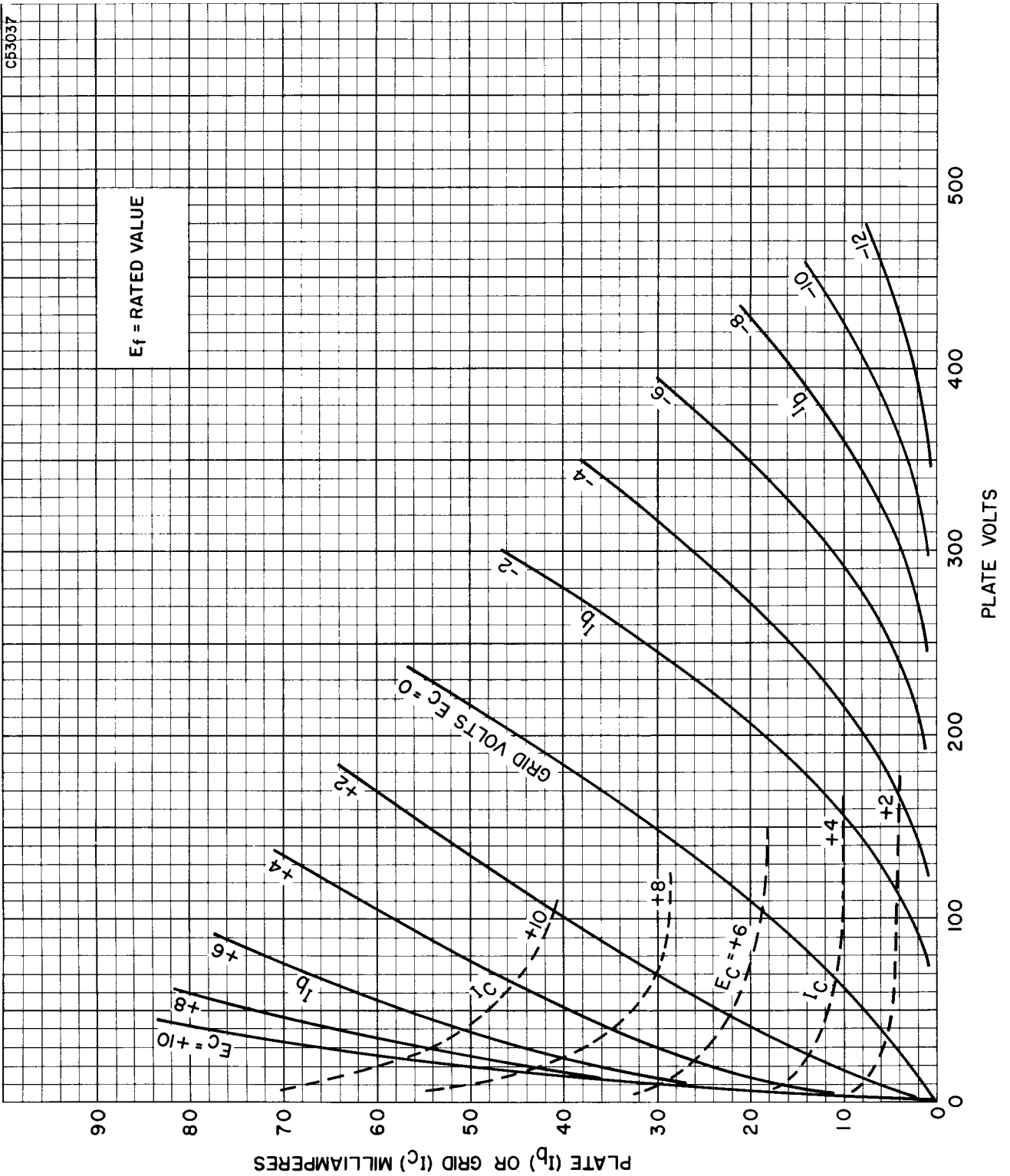
1. *Heater Warm-up Time is defined as the time required in the circuit shown below for the voltage across the heater terminals to increase from zero to the heater test voltage (V1). The conditions used in conjunction with the test circuit depend upon the rated heater voltage and current of the tube under test. For this type: E = 16.8 Volts, R = 21.0 Ohms, V1 = 3.33 Volts.*



E — Applied Voltage, RMS or DC
 R — Total Series Resistance
 V1 — Heater Test Voltage, RMS or DC
 (80% Rated Heater Voltage)

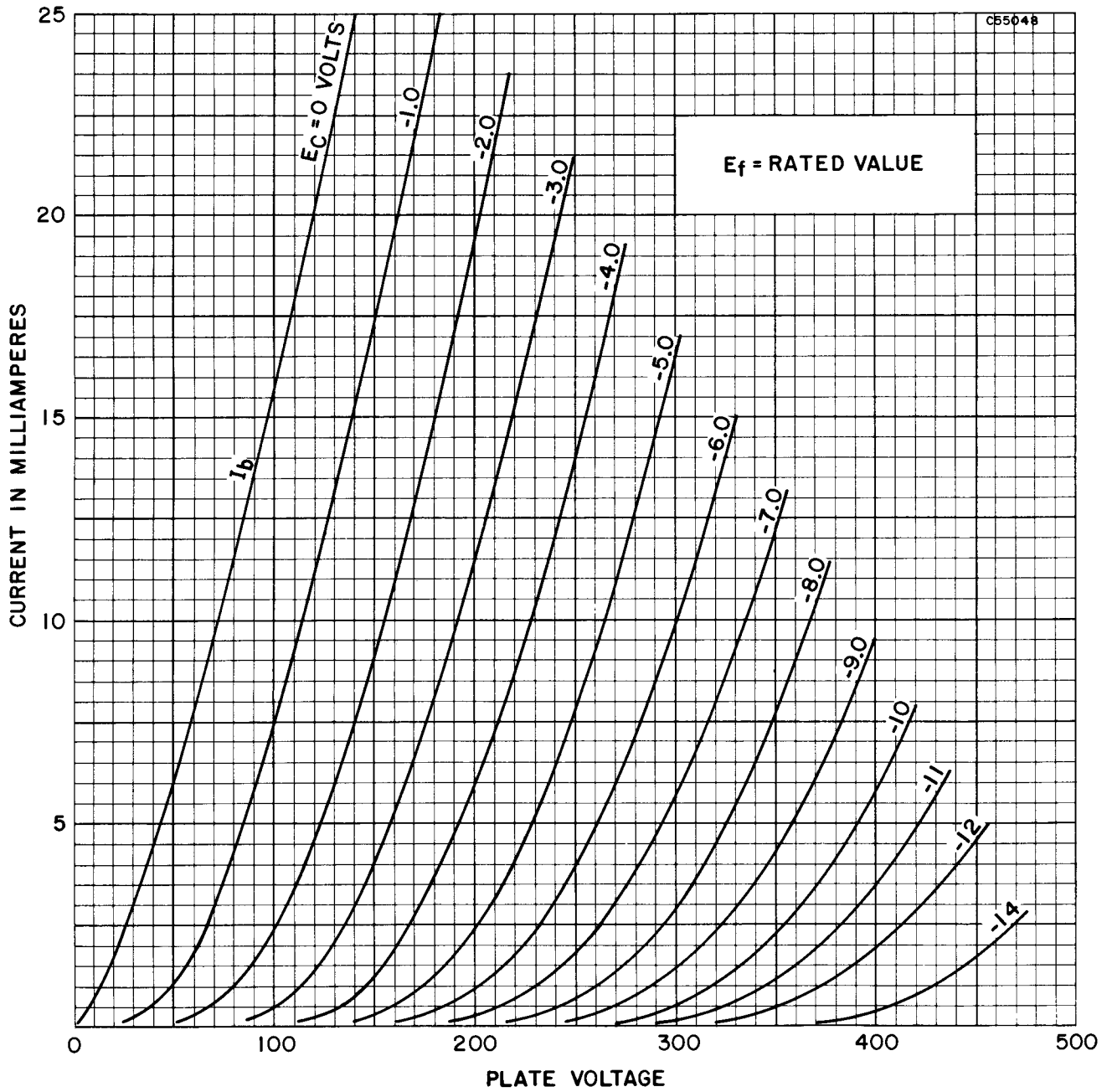
2. *Under cutoff conditions when the tube is used as a cascode amplifier, this rating may be as high as 300 volts maximum.*
3. *Shield No. 315 connected to heater unless specified differently.*
4. *Shield No. 315 connected to ground.*

AVERAGE PLATE CHARACTERISTICS

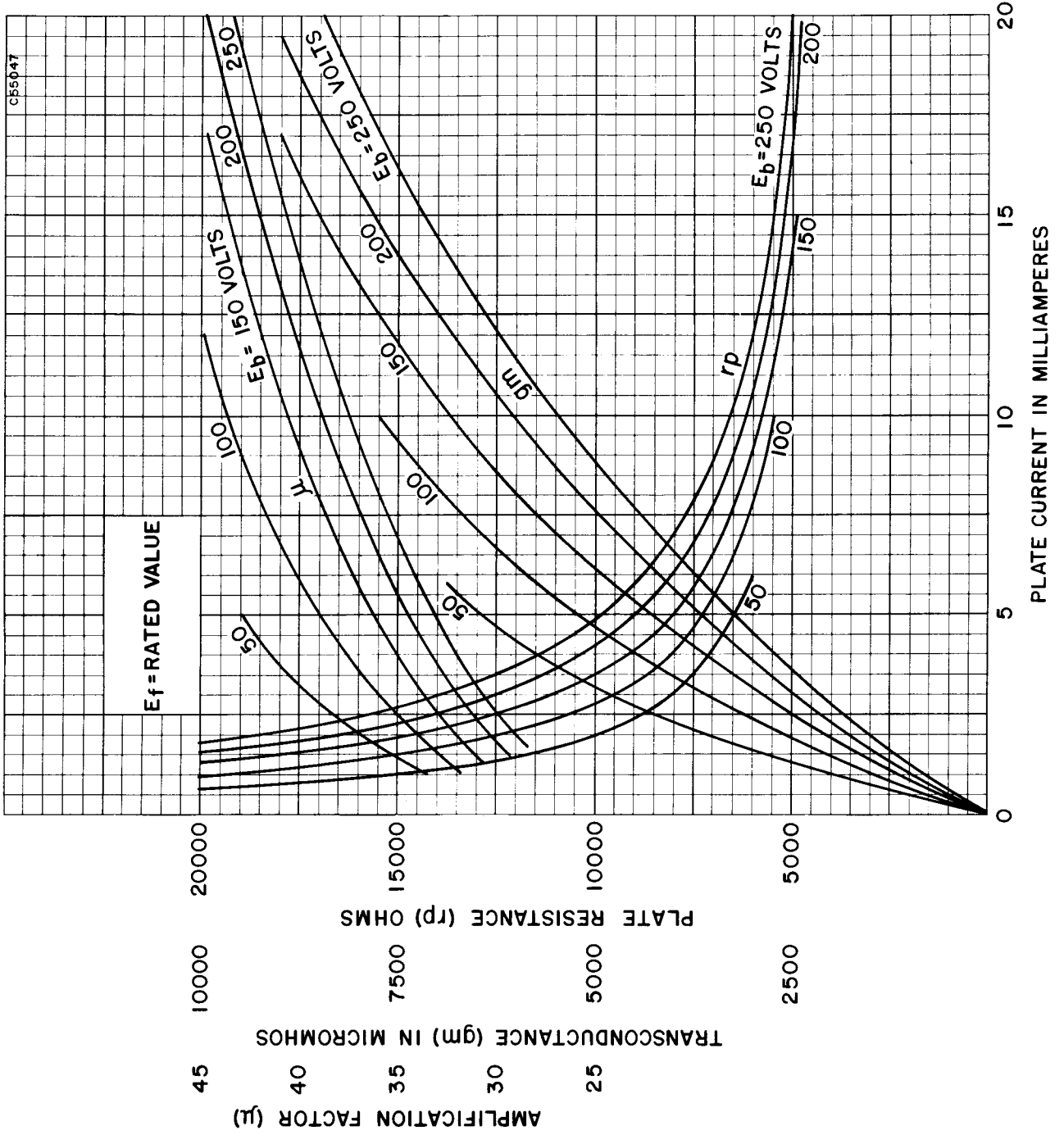


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AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

