

MECHANICAL DATA

| | |
|-----------------------------|------------------------------|
| Bulb | T-5½ |
| Base | E7-1, Miniature Button 7-Pin |
| Outline | 5-3 |
| Basing | 7EK |
| Cathode | Coated Unipotential |
| Mounting Position | Any |

HEATER CHARACTERISTICS

| | |
|---|---------------|
| Heater Voltage ¹ | 12.6 Volts |
| Heater Current | 450 Ma |
| Heater-Cathode Voltage (Design Center Values) | |
| Heater Negative with Respect to Cathode | |
| Total DC and Peak | 30 Volts Max. |
| Heater Positive with Respect to Cathode | |
| Total DC and Peak | 30 Volts Max. |

RATINGS (Design Center Values—except as noted)

| | |
|---|--------------------|
| Plate Voltage | 30 Volts Max. |
| Positive Grid No. 1 Voltage | 16 Volts Abs. Max. |
| Grid No. 1 Supply Voltage | 30 Volts Max. |
| Negative Grid No. 2 Voltage | -20 Volts Max. |
| Grid No. 2 Circuit Resistance | 2.2 Megohms Max. |

CHARACTERISTICS

| | |
|--|-------------|
| Plate Voltage | 12.6 Volts |
| Grid No. 2 (Control Grid) Voltage | -2.0 Volts |
| Grid No. 1 (Space-charge Grid) Voltage | +12.6 Volts |
| Plate Current | 8.0 Ma |
| Grid No. 1 (Space-charge Grid) Current | 85.0 Ma |
| Plate Resistance | 800 Ohms |
| Amplification Factor (Grid No. 2 to Plate) | 5.6 |
| Transconductance (Grid No. 2 to Plate) | 7000 μmhos |

TYPICAL OPERATION

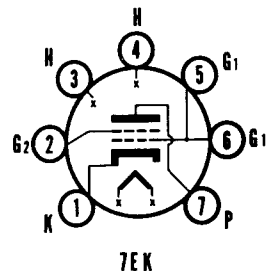
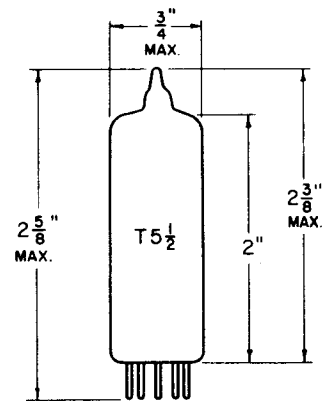
| | |
|--|-------------|
| Plate Voltage | 12.6 Volts |
| Grid No. 2 (Control Grid) Voltage ² | -2.0 Volts |
| Grid No. 1 (Space-charge Grid) Voltage | +12.6 Volts |
| Peak AF Grid No. 2 Voltage | 2.5 Volts |
| AF Signal Source Resistance | 100000 Ohms |
| Load Resistance | 800 Ohms |
| Plate Current | 8.0 Ma |
| Grid No. 1 (Space-charge Grid) Current | 85 Ma |
| Power Output | 35 Mw |
| Total Harmonic Distortion | 10 Percent |

NOTES:

1. When used in automotive service from a 12-volt source, under no circumstances should the heater voltage be less than 10.0 volts or more than 15.9 volts. These extreme variations in heater voltage may be tolerated for short periods; however, operation at or near these absolute limits in heater voltage necessarily involves sacrifice in performance at low heater voltage and in life expectancy at high heater voltage.
2. Obtained by Grid No. 2 rectification in which case the zero signal plate current is approximately 35 Ma.

QUICK REFERENCE DATA

The Sylvania Type 12K5 is a tetrode designed for space-charge operation. It is intended for service as a power amplifier driver where the potentials are obtained directly from a 12 volt automobile battery.



SYLVANIA ELECTRIC PRODUCTS INC.

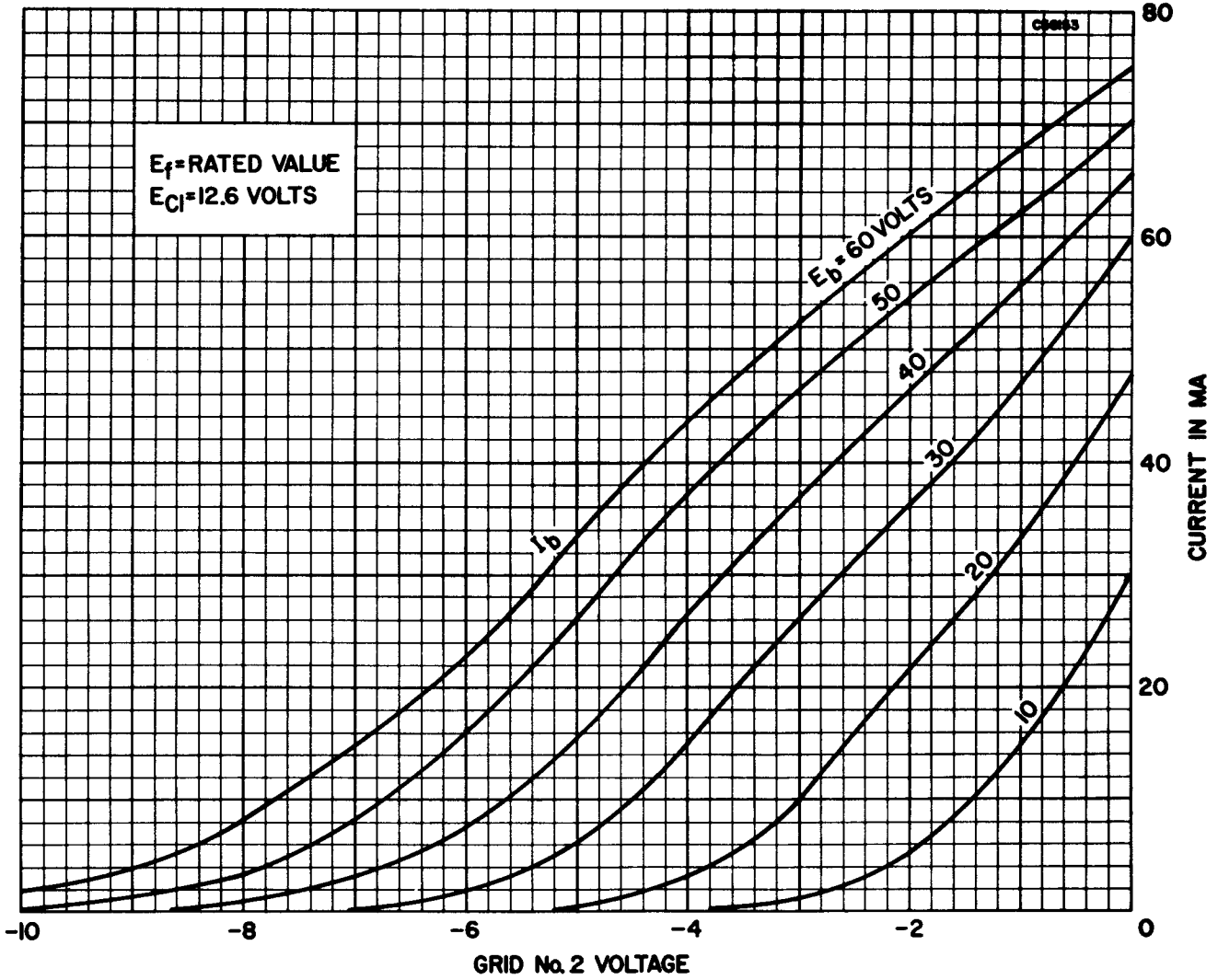
RADIO TUBE DIVISION EMPORIUM, PA.

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

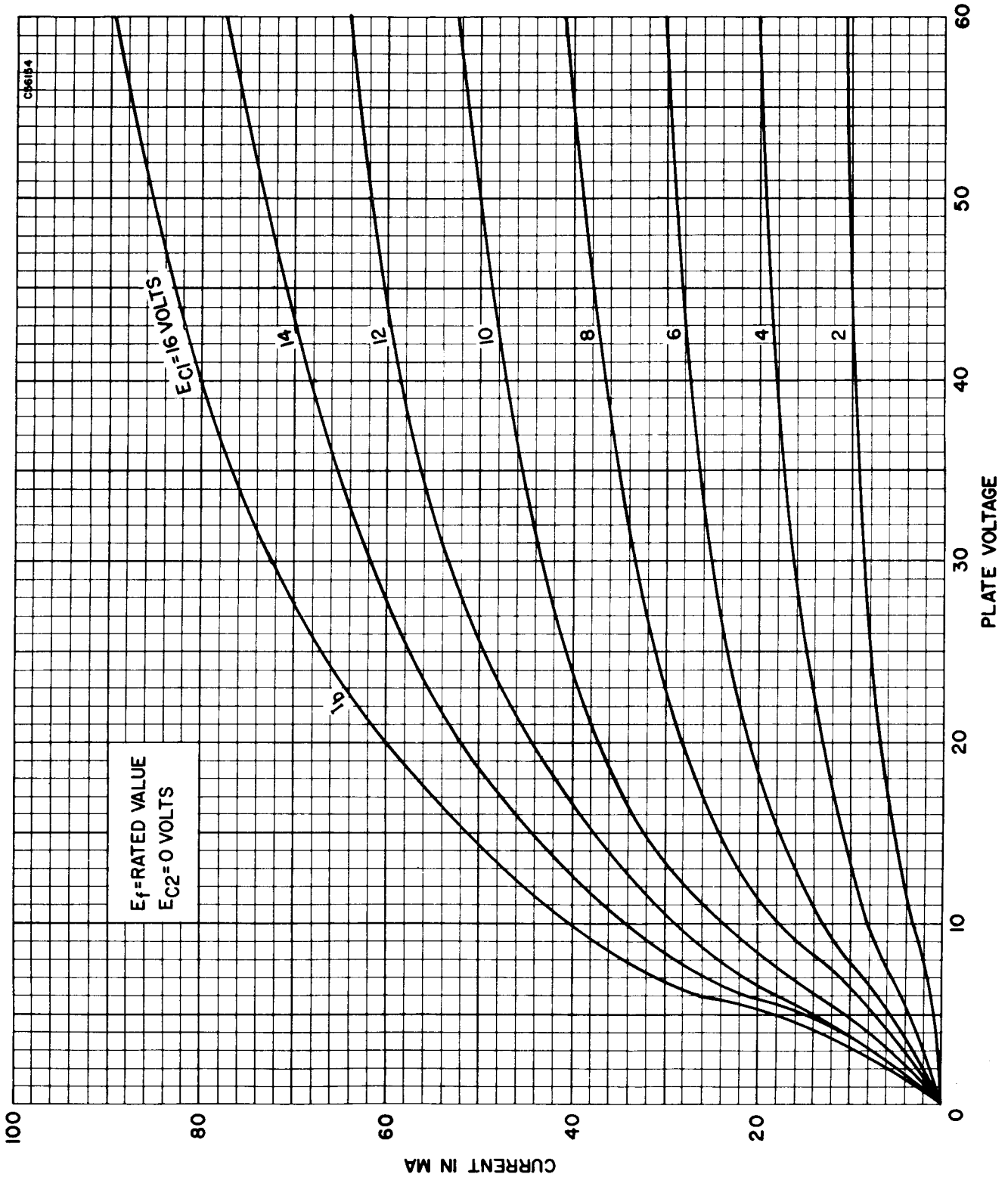
DEC. 1956

PAGE 1 OF 4

AVERAGE TRANSFER CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

