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engineering data service

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6BG6G

MECHANICAL DATA

Bulb	ST-16
Base	Medium Shell Octal
Basing	5BT
Cap	Small
Cathode	Unipotential
Mounting Position	Vertical, Base Up or Down; Horizontal, With Plane of Pins 2 and 7 Vertical

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	900 Ma

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Control Grid to Plate	0.65 μμf Max.
Input	11.0 μμf
Output	6.5 μμf

RATINGS (Design Center Values — except as noted)

Horizontal Deflection Amplifier[1]

DC Plate Supply Voltage	700 Volts Max.
Peak Positive Plate Voltage	6600 Volts Abs. Max.
Peak Negative Plate Voltage	1500 Volts Max.
DC Plate Current	100 Ma Max.
Plate Dissipation	20 Watts Max.
Screen Voltage	350 Volts Max.
Screen Dissipation	3.2 Watts Max.
Negative Control Grid Voltage	50 Volts Max.
Peak Negative Control Grid Voltage	400 Volts Max.
Control Grid Resistance	1.0 Megohm Max.
Heater-Cathode Voltage	135 Volts Max.
Bulb Temperature (at hottest point)	210° C Max.

TYPICAL OPERATING CONDITIONS[2]

Horizontal Deflection Amplifier[1]

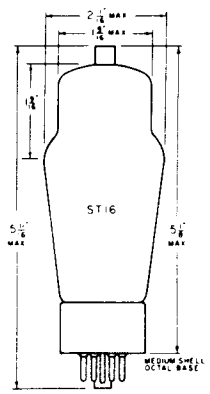
DC Plate Supply Voltage	
From DC Power Supply	400 Volts
From DC Boost	150 Volts
Total Plate Supply Voltage	550 Volts
Screen Voltage	250 Volts
Cathode Bias Resistor	100 Ohms
Control Grid Signal Voltage	
Sawtooth Component	75 Volts
Negative Peaking Component	50 Volts
Plate Current	85 Ma
Screen Current	10 Ma
Peak Cathode Current	300 Ma
Average Control Grid Current	30 μa
Peak Positive Plate Voltage	5500 Volts
Peak Negative Plate Voltage	550 Volts
Control Grid Circuit Resistance	1.0 Megohm

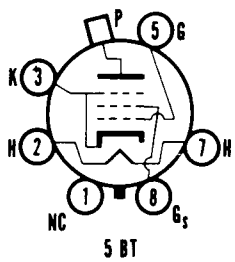
NOTES:

1. *For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations: Federal Communications Commission", the duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.*
2. *For 17" 70° deflection CR tube with 12 Kv second anode voltage.*

QUICK REFERENCE DATA

Pentode beam power amplifier designed for use as a horizontal deflection driver tube in television receivers using electromagnetic deflection.





SYLVANIA ELECTRIC PRODUCTS INC.

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MAY 1952

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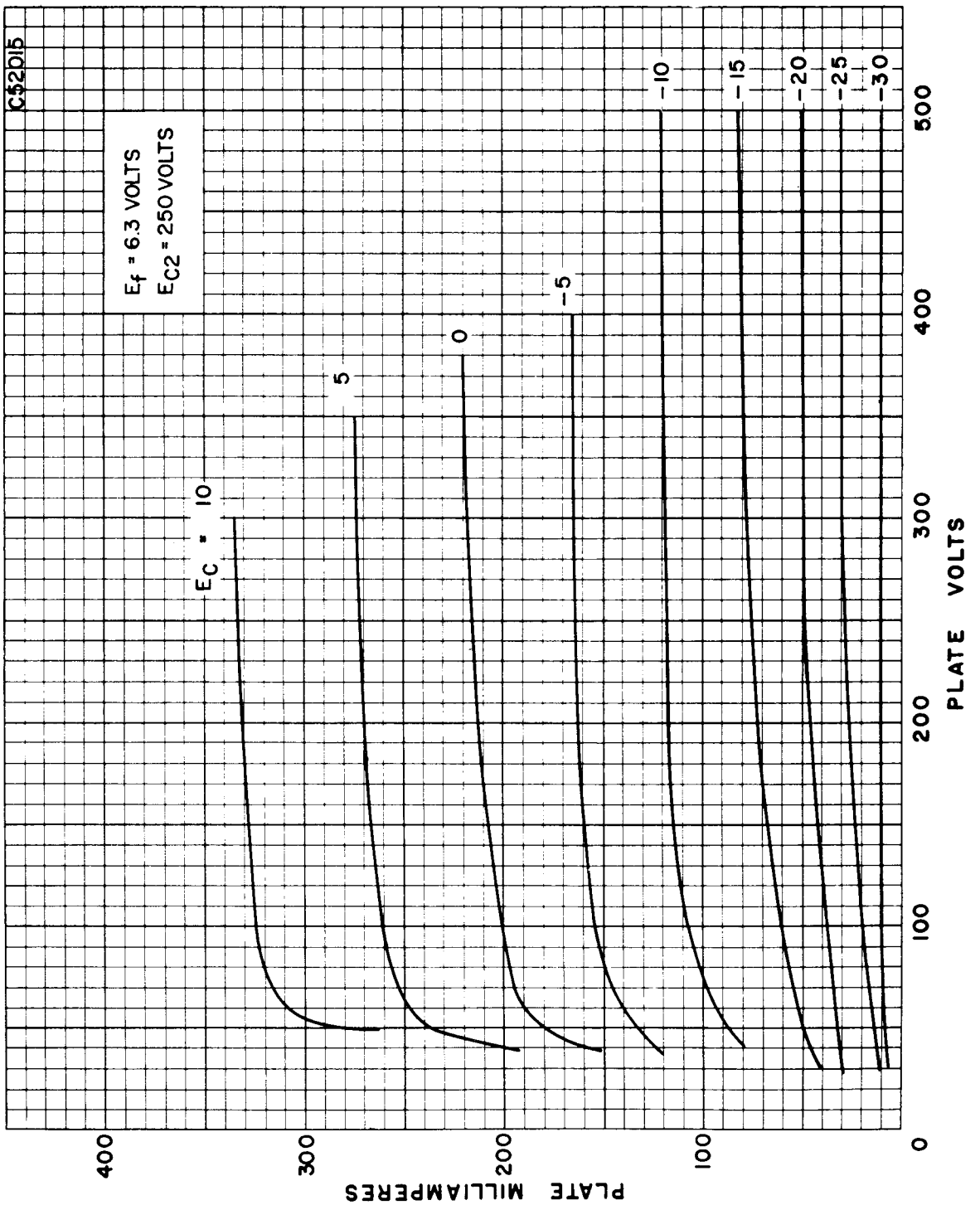
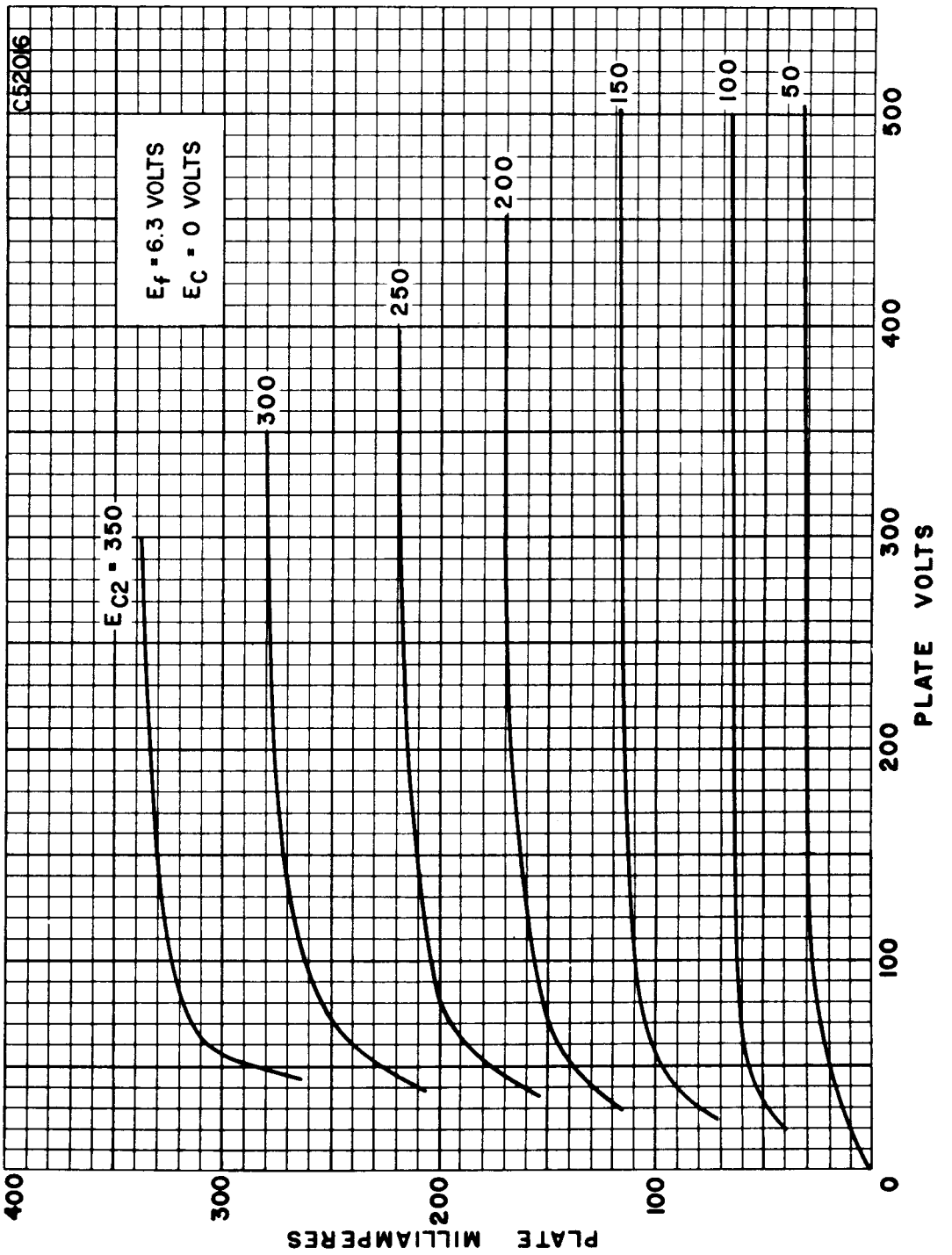
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



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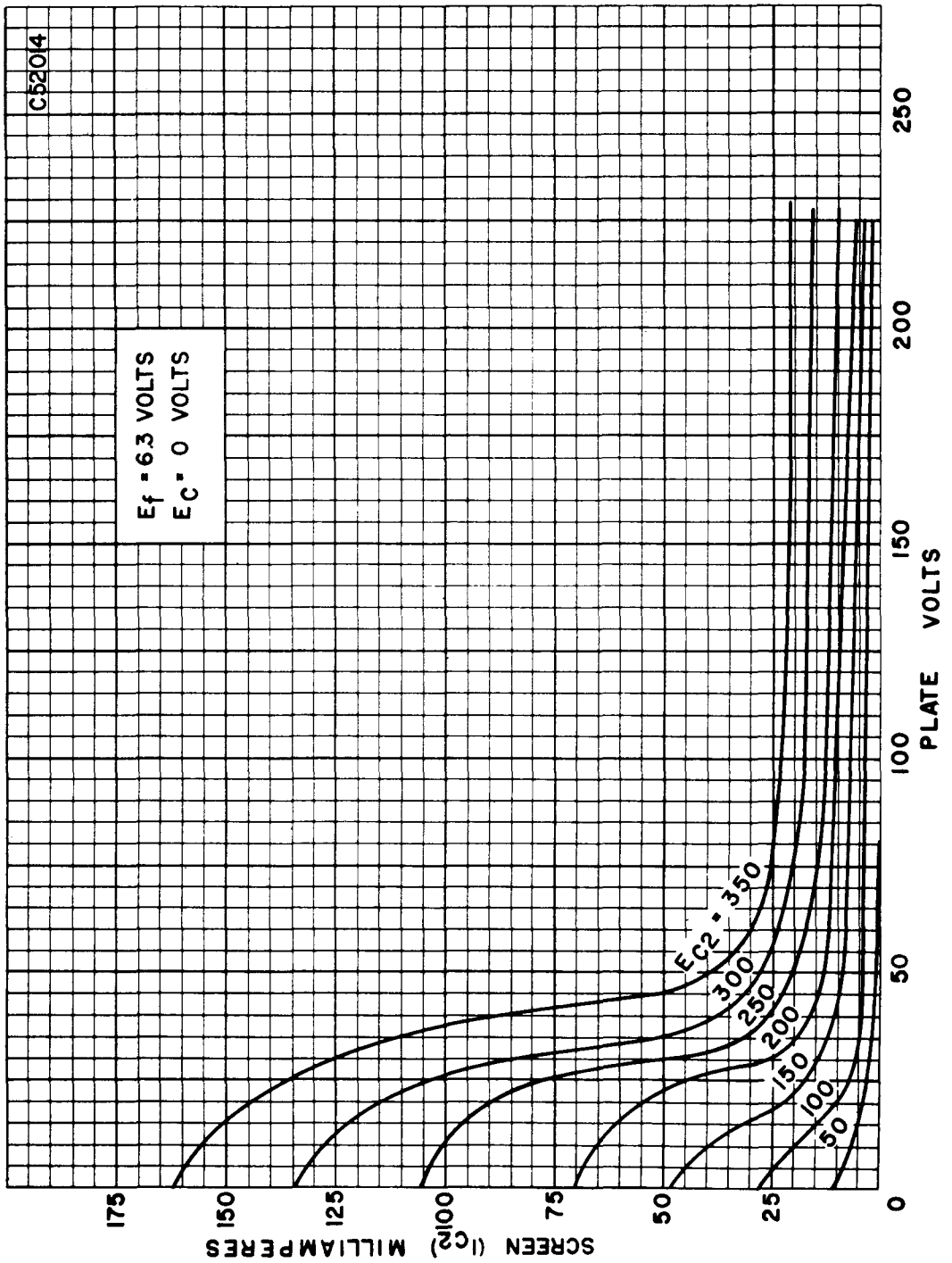
AVERAGE CHARACTERISTICS