



engineering data service

SYLVANIA
12G4

MECHANICAL DATA

Bulb	T-5 1/2
Base	Miniature Button 7-Pin
Basing	6BG
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	12.6 Volts
Heater Current	150 Ma

DIRECT INTERELECTRODE CAPACITANCES

	Shielded ¹	Unshielded
Grid to Plate	3.4	3.4 μf
Input	2.6	2.4 μf
Output	3.2	0.9 μf

RATINGS (Design Center Values)

Plate Voltage	300 Volts	Max.
Plate Dissipation	2.5 Watts	Max.
Heater-Cathode Voltage	90 Volts	Max.

CHARACTERISTICS AND TYPICAL OPERATION

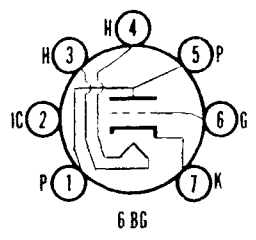
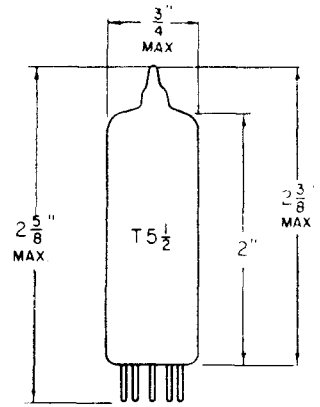
Plate Voltage	90	250 Volts
Grid Voltage	0	-8 Volts
Plate Current	10	9 Ma
Transconductance	3000	2600 μmhos
Plate Resistance	6700	7700 Ohms
Amplification Factor	20	20
Grid Voltage (approx.)		
For $I_b = 10 \mu\text{a}$	-7	-18 Volts

NOTE:

1. With shield No. 316 connected to cathode.

QUICK REFERENCE DATA

The Sylvania Type 12G4 is a miniature, general purpose, medium mu triode. Except for heater voltage, the type 12G4 is similar to one section of a type 6SN7GT.



SYLVANIA ELECTRIC
PRODUCTS INC.
RADIO TUBE DIVISION

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA
JANUARY 1954

12G4

Graph showing Plate Current (I_b) and Grid Current (I_c) versus Plate Voltage for a 6X5 vacuum tube at $E_f = 6.3$ Volts.

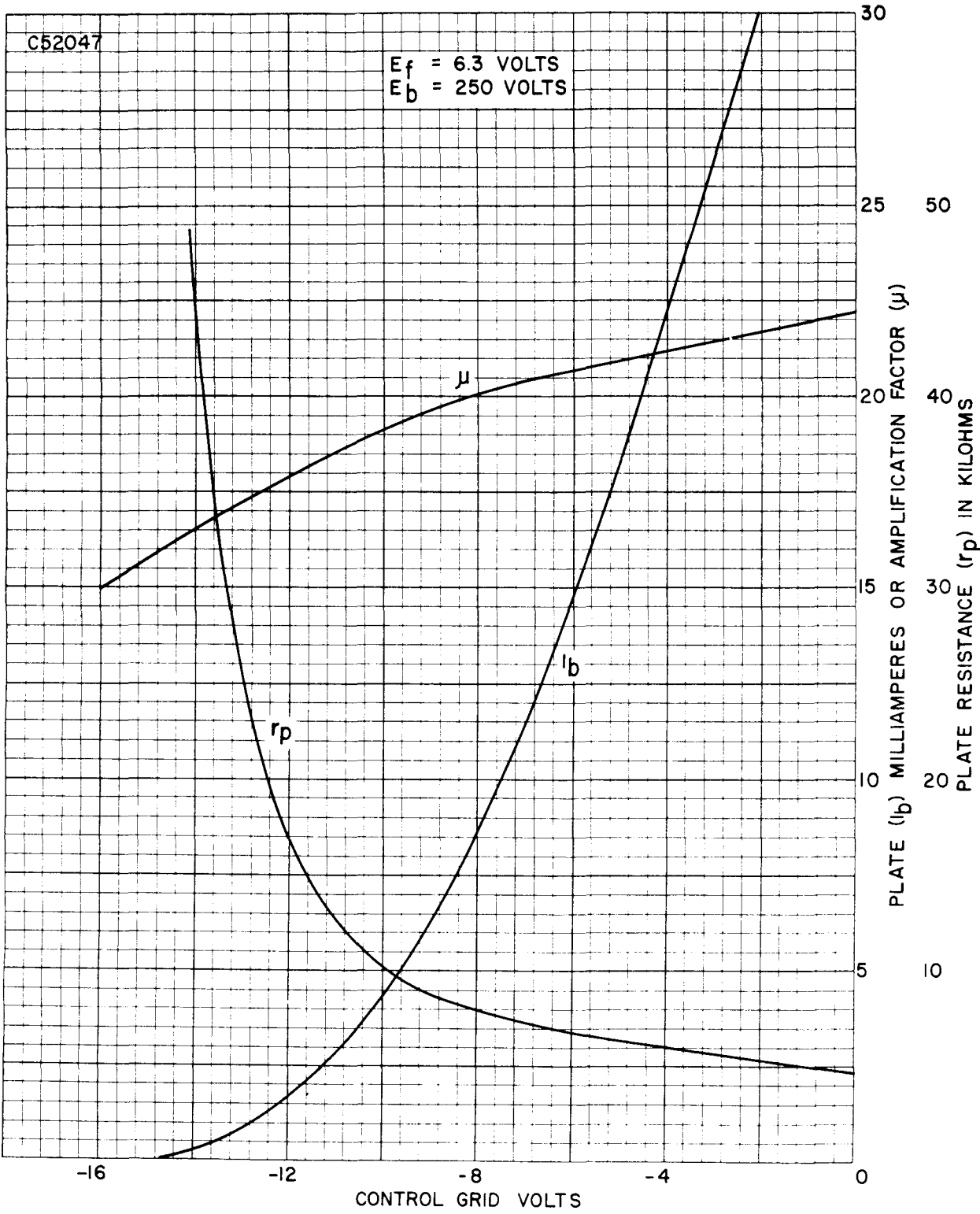
The Y-axis represents Plate (I_b) or Grid (I_c) Current in Milliamperes, ranging from 0 to 25. The X-axis represents Plate Voltage, ranging from 0 to 500.

Curves are plotted for various Grid Voltages (E_c):

- $E_c = 6$ (Dashed line, labeled I_c)
- $E_c = 4$ (Dashed line)
- $E_c = 2$ (Dashed line)
- $E_c = 0$ (Dashed line)
- $E_c = -2$ (Solid line)
- $E_c = -4$ (Solid line)
- $E_c = -6$ (Solid line)
- $E_c = -8$ (Solid line)
- $E_c = -10$ (Solid line)
- $E_c = -12$ (Solid line)
- $E_c = -14$ (Solid line)
- $E_c = -16$ (Solid line)
- $E_c = -18$ (Solid line)
- $E_c = -20$ (Solid line)
- $E_c = -22$ (Solid line)
- $E_c = -24$ (Solid line)
- $E_c = -26$ (Solid line)
- $E_c = -28$ (Solid line)
- $E_c = -30$ (Solid line)

The solid lines represent Plate Current (I_b), and the dashed lines represent Grid Current (I_c).

AVERAGE TRANSFER CHARACTERISTICS



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