MECHANICAL DATA

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

ELECTRICAL DATA

HEATER CHARACTERISTICS AND RATINGS

Average Characteristics

Heater Operation	Parallel
Heater Voltage[1]	6.3 Volts
Heater Current	365 Ma

Ratings (Design Maximum Values)

	Min-Max
Heater Voltage[2]	5.7 - 6.9 Volts
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Each Section)

	Shielded	Unshielded
Grid to Plate	1.4	1.4 pf
Input: g to (h + k)	3.3	3.3 pf
Output: p to (h + k)	2.5	1.8 pf
Grid to Grid (Max.)	.005	.005 pf
Plate to Plate (Max.)	.015	.045 pf

RATINGS (Design Maximum Values)

Continuous Class C Service at 175 mc[4]

Plate Voltage	200 Volts	Max.
Plate Dissipation (Each Plate)	3.5 Watts	Max.
Plate Dissipation (Both Plates)	7.0 Watts	Max.
Plate Input (Each Plate)	5.5 Watts	Max.
Cathode Current (Each Cathode)	30 mAdc	Max.
Grid Current (Each Grid)	2.5 mAdc	Max.
Negative Grid Voltage	75 Volts	Max.
Grid Circuit Resistance		
Fixed Bias	0.1 Megohm	Max.
Cathode Bias	0.5 Megohm	Max.

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

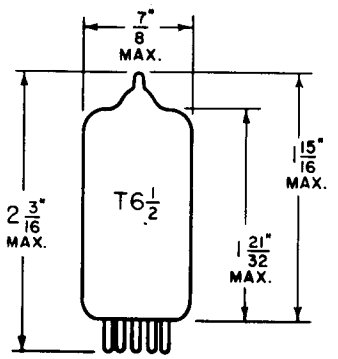
Plate Voltage	90 Volts
Grid Voltage	−1.3 Volts
Plate Current	15 Ma
Transconductance	12,500 μmhos
Amplification Factor	33

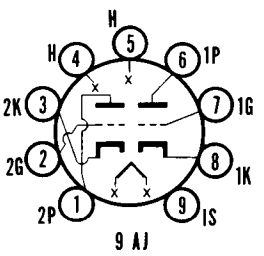
Class-C RF Frequency Multiplier	Doubler to 175 Mc
Plate Voltage	160 Volts
For Grid Voltage	−70 Volts
Use Grid Resistor	33,000 Ohms
Peak RF Grid Voltage	77 Volts
Grid Current	2.5 Ma
Plate Current	26 Ma
Power Output[5] (Approx.)	1.0 Watt

QUICK REFERENCE DATA

The Sylvania Type 7803 is a T-6½ medium mu double triode designed for Continuous Class C Amplifier Service in the 200 megacycle range.

The rating values apply specifically to Sonobouy and other battery applications where considerations of power output are paramount, and considerations of long life are of lesser importance.





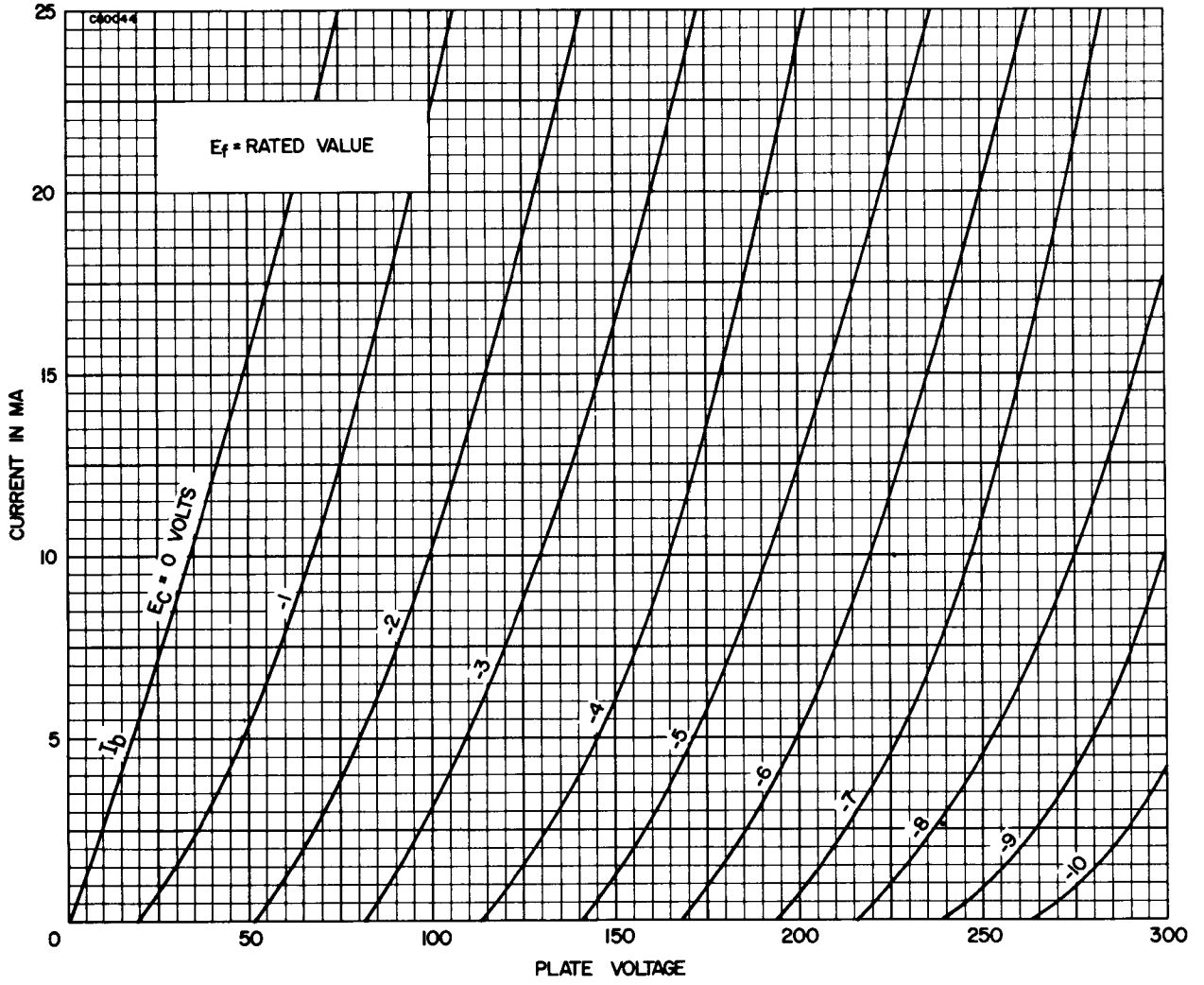
SYLVANIA ELECTRONIC TUBES
A Division of Sylvania Electric Products Inc.
RECEIVING TUBE OPERATIONS
EMPORIUM, PA.
Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA
JUNE, 1963

File Under
RECEIVING TUBES

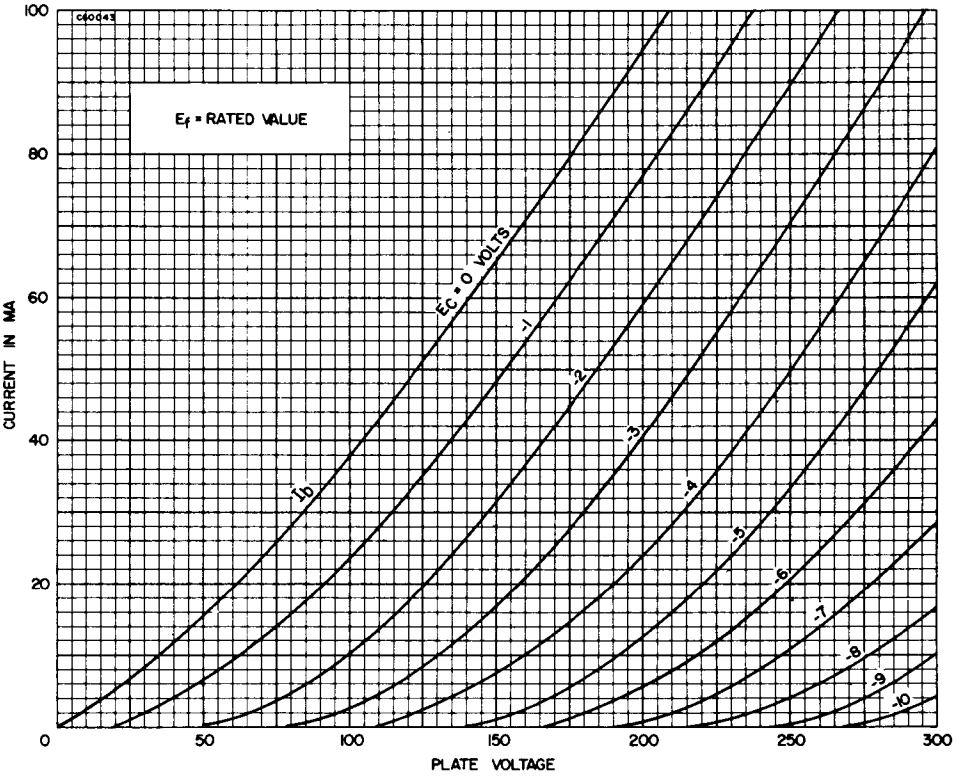
NOTES:

1. *For parallel operation of heaters, equipment should be designed that at normal supply voltage bogey tubes will operate at this value of heater voltage.*
2. *Heater voltage supply variations shall be restricted to maintain heater voltage within the specified values.*
3. *Shield No. 315.*
4. *The rating values apply specifically to Sonobouy and other battery applications where considerations of power output are paramount, and considerations of long life are of lesser importance.*
5. *These values are for useful power and are measured at the load of the output circuit.*
6. *To insure satisfactory operation in sonobouy applications Type 7803 is subjected to and must successfully pass an impact acceleration test at an acceleration level of 500 G.*

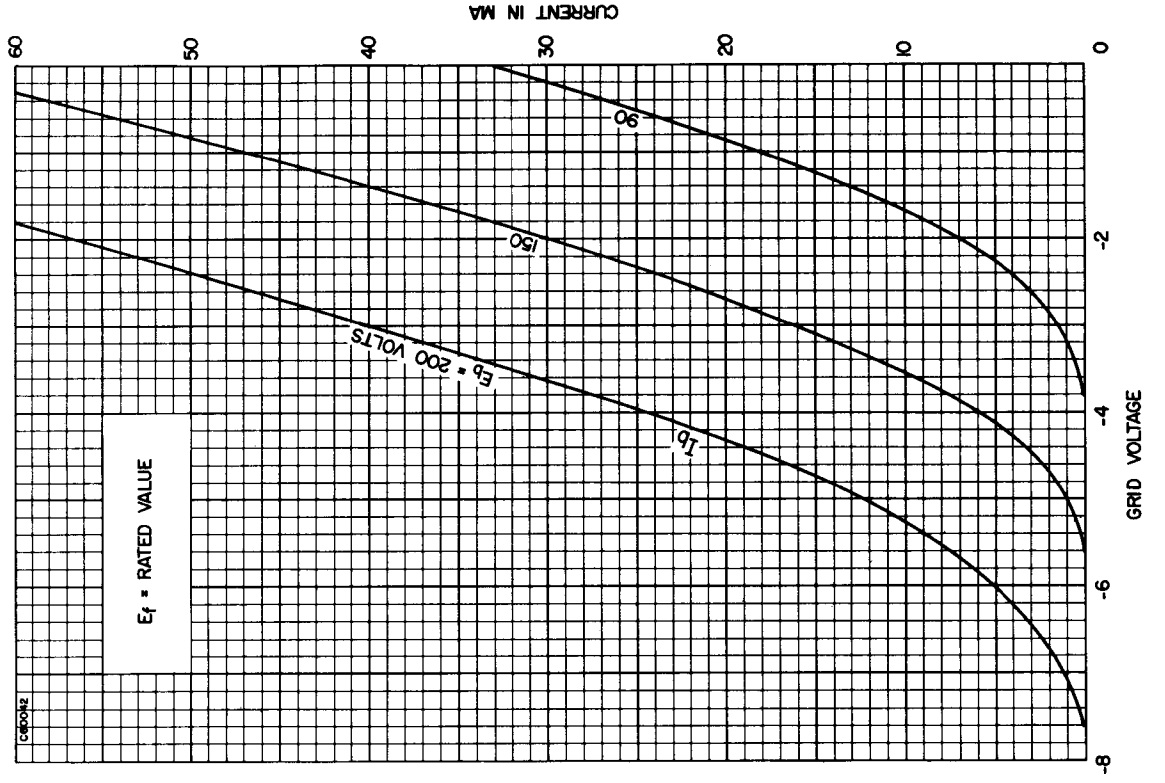
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



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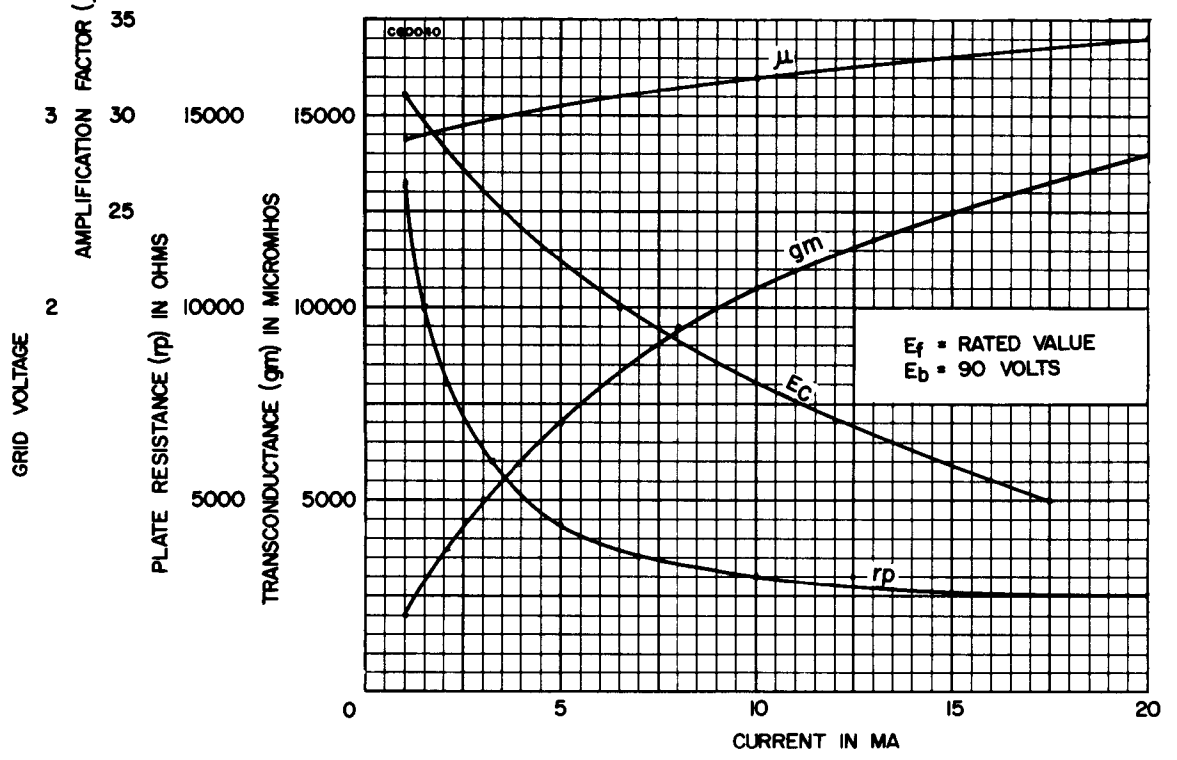

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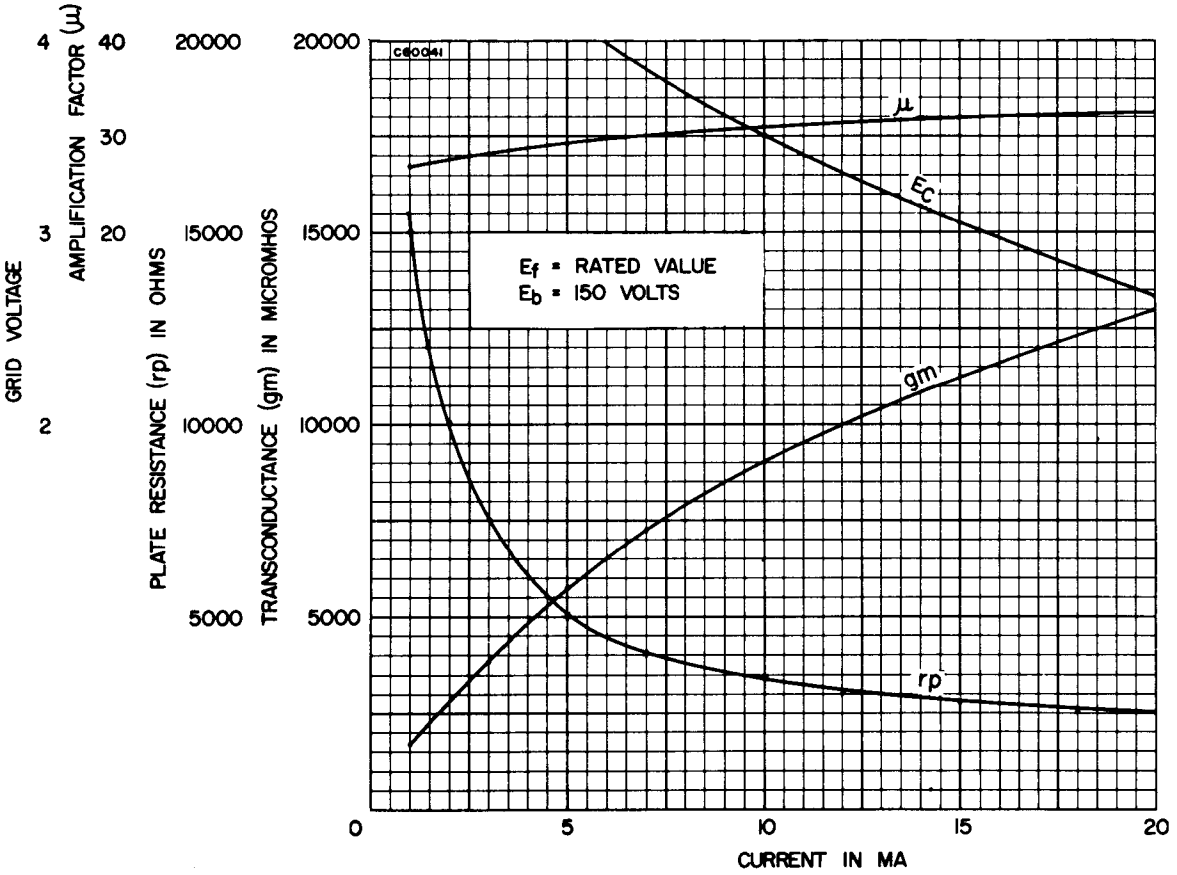
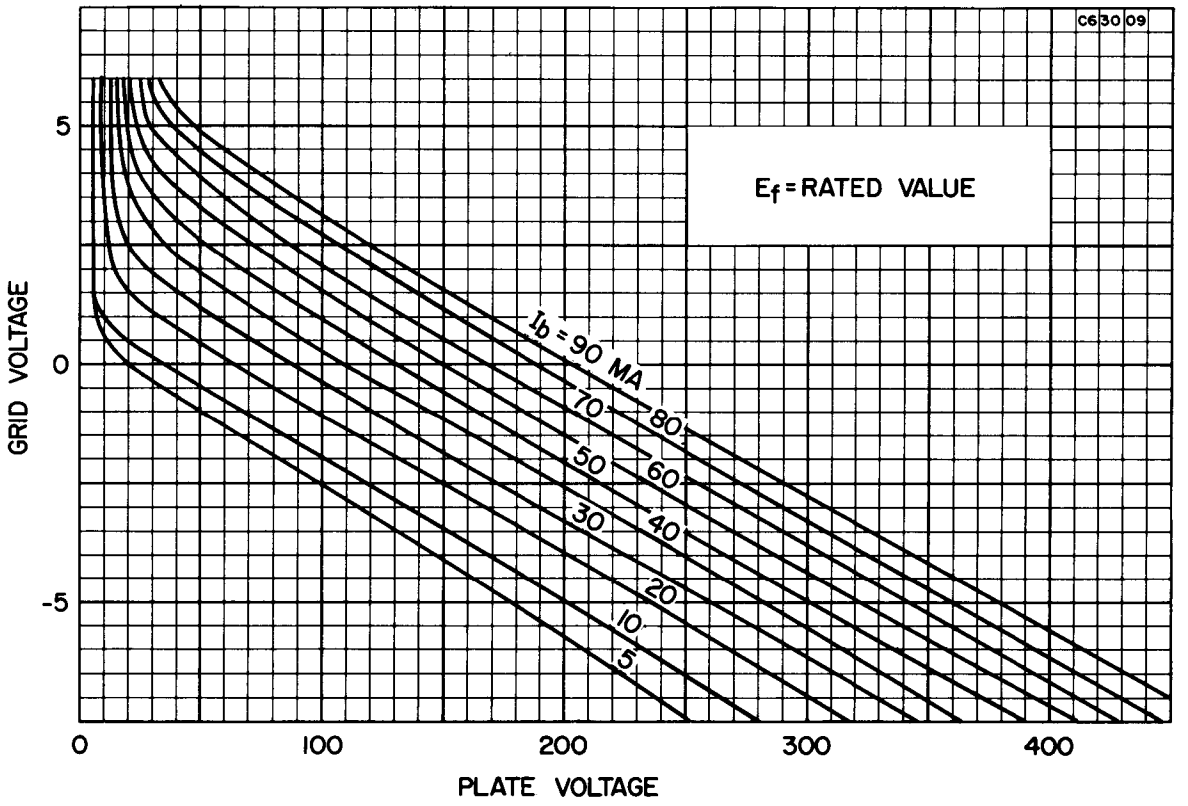


CONSTANT PLATE CURRENT CHARACTERISTICS



CONSTANT GRID CURRENT CHARACTERISTICS