

RADIOTRON

1L5-G

POWER AMPLIFIER PENTODE

1L5-G
SHEET 1

Filament	Coated		
Voltage	2.0		d-c volts
Current	0.24		amp.
Direct Interelectrode Capacitances			
Pentode Connection:-			
Grid to Plate	1.0		$\mu\text{uF.}$
Input	8.0		$\mu\text{uF.}$
Output	11.0		$\mu\text{uF.}$
Triode Connection [†] :-			
Grid to Plate	2.6		$\mu\text{uF.}$
Input	6.4		$\mu\text{uF.}$
Output	13.7		$\mu\text{uF.}$
Maximum Overall Length			4-21/32"
Maximum Diameter			1-13/16"
Bulb			ST-14
Mounting Position		◊ Vertical, Base Down	
Base		Medium Shell Octal 7-Pin	
Pin 1-No Connection		Pin 5-Grid	
Pin 2-Filament +		Pin 7-Filament -	
Pin 3-Plate		Pin 8-No Connection	
Pin 4-Screen			



BOTTOM VIEW (G-6X)

AMPLIFIER - CLASS A₁ (Pentode Connection)

Plate Voltage		180 max.	volts
Screen Voltage		180 max.	volts
Plate Dissipation		1.8 max.	watts
Screen Dissipation		0.5 max.	watt

Typical Operation:

Filament Voltage	2.0	2.0	2.0	d-c	volts
Plate Voltage	90	135	180		volts
Screen Voltage	90	135	180		volts
Grid Voltage [‡]	-2.5	-4.5	-6.0		volts
Cathode Resistor	555	600	508		ohms
Peak A-F Grid Voltage	-2.75	-4.75	-6.25		volts
Plate Resistance (approx.)	0.175	0.15	0.137		megohm
Transconductance	1830	2150	2400		μmhos
Zero-Sig. Plate Current	3.6	6.0	9.5		mA.
Max.-Sig. Plate Current	3.6	6.4	9.7		mA.
Zero-Sig. Screen Current	0.9	1.5	2.3		mA.
Max.-Sig. Screen Current	1.5	2.4	4.0		mA.
Load Resistance	25000	15000	15000		ohms
Total Harmonic Distortion	10	10	8		%
Power Output	120	340	750		mW.

AMPLIFIER - CLASS A₁ (Triode Connection)[#]

Plate Voltage		180 max.	volts
Plate & Screen Dissipation (total)		2.0 max.	watts
Cathode Current		13.0 max.	mA.

Typical Operation:

Filament Voltage		2.0	d-c	volts
Plate Voltage		135		volts
Grid Voltage		-6.0		volts
Peak A-F Grid Voltage		6.25		volts
Zero-Sig. Plate Current		4.4		mA.
Max.-Sig. Plate Current		4.7		mA.
Plate Resistance		6750		ohms
Transconductance		1940		μmhos
Amplification Factor		13.1		
Load Resistance		12000		ohms
Second Harmonic Distortion		5		%
Power Output		105		mW.

◊ Horizontal operation permitted if pins 2 and 7 are in a vertical plane.

* Relative to Negative Filament Return. The d-c resistance in the grid circuit should be limited to 1.0 megohm.

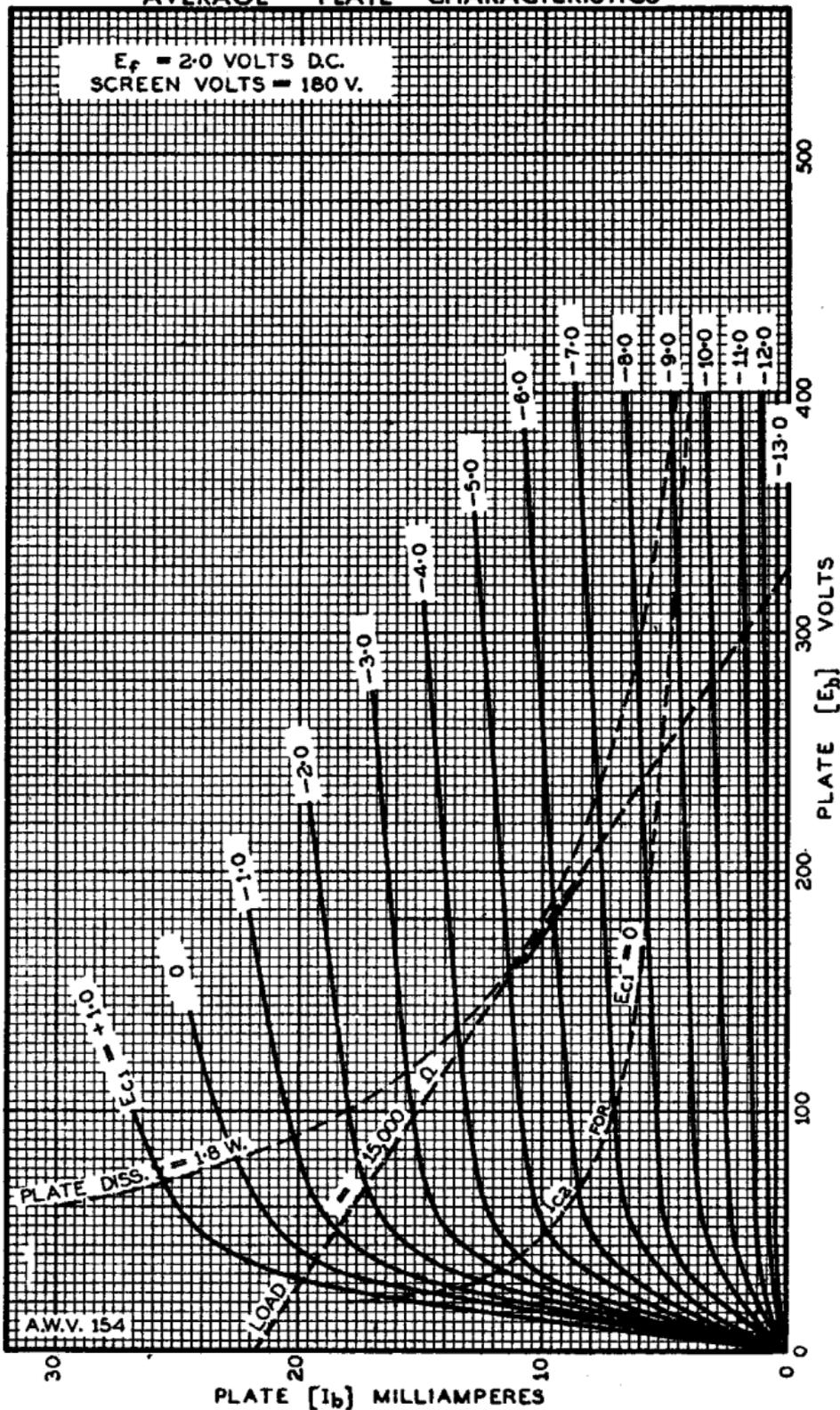
Screen connected to plate.

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AVERAGE PLATE CHARACTERISTICS

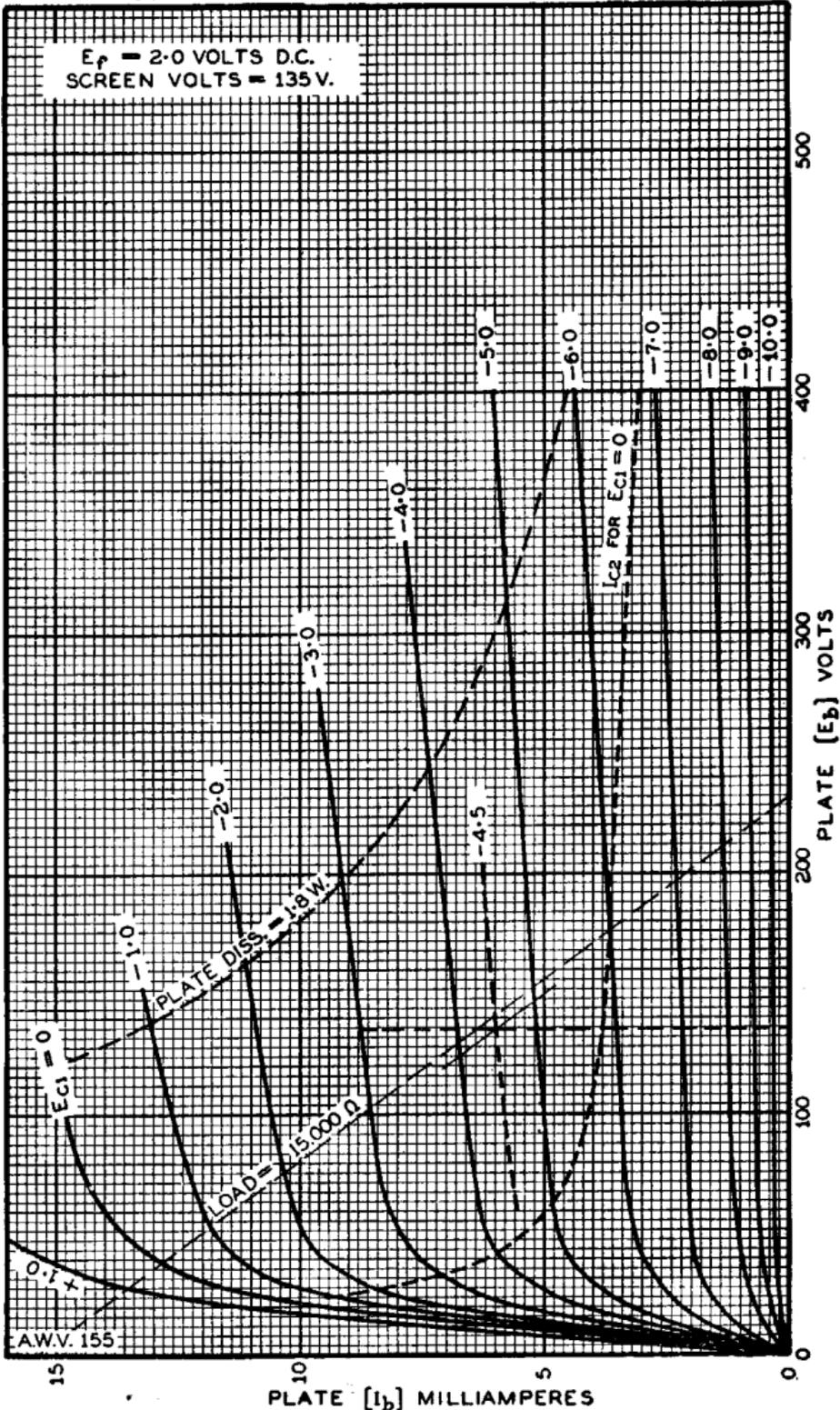


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SHEET 2

AVERAGE PLATE CHARACTERISTICS

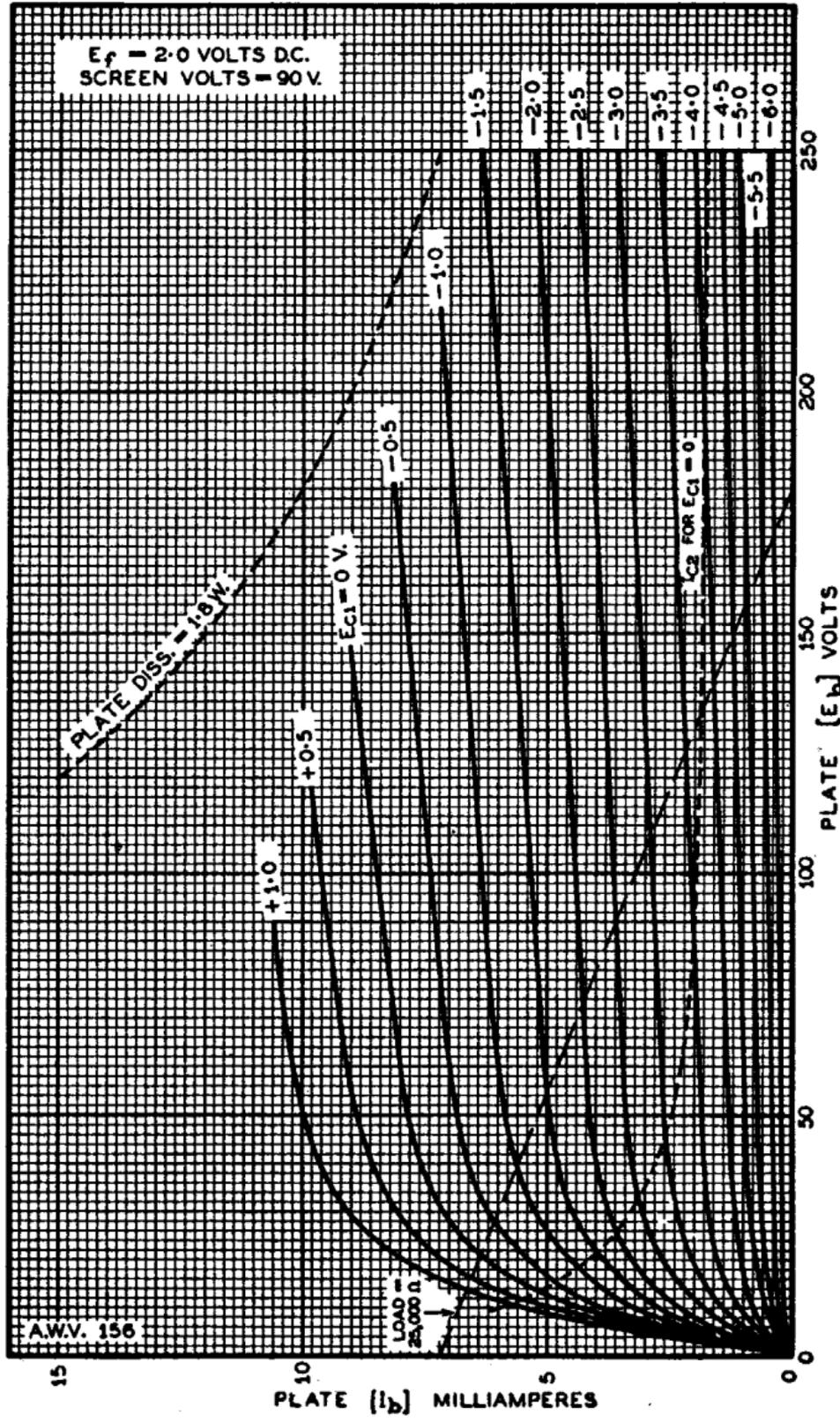


1L5-G

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AVERAGE PLATE CHARACTERISTICS



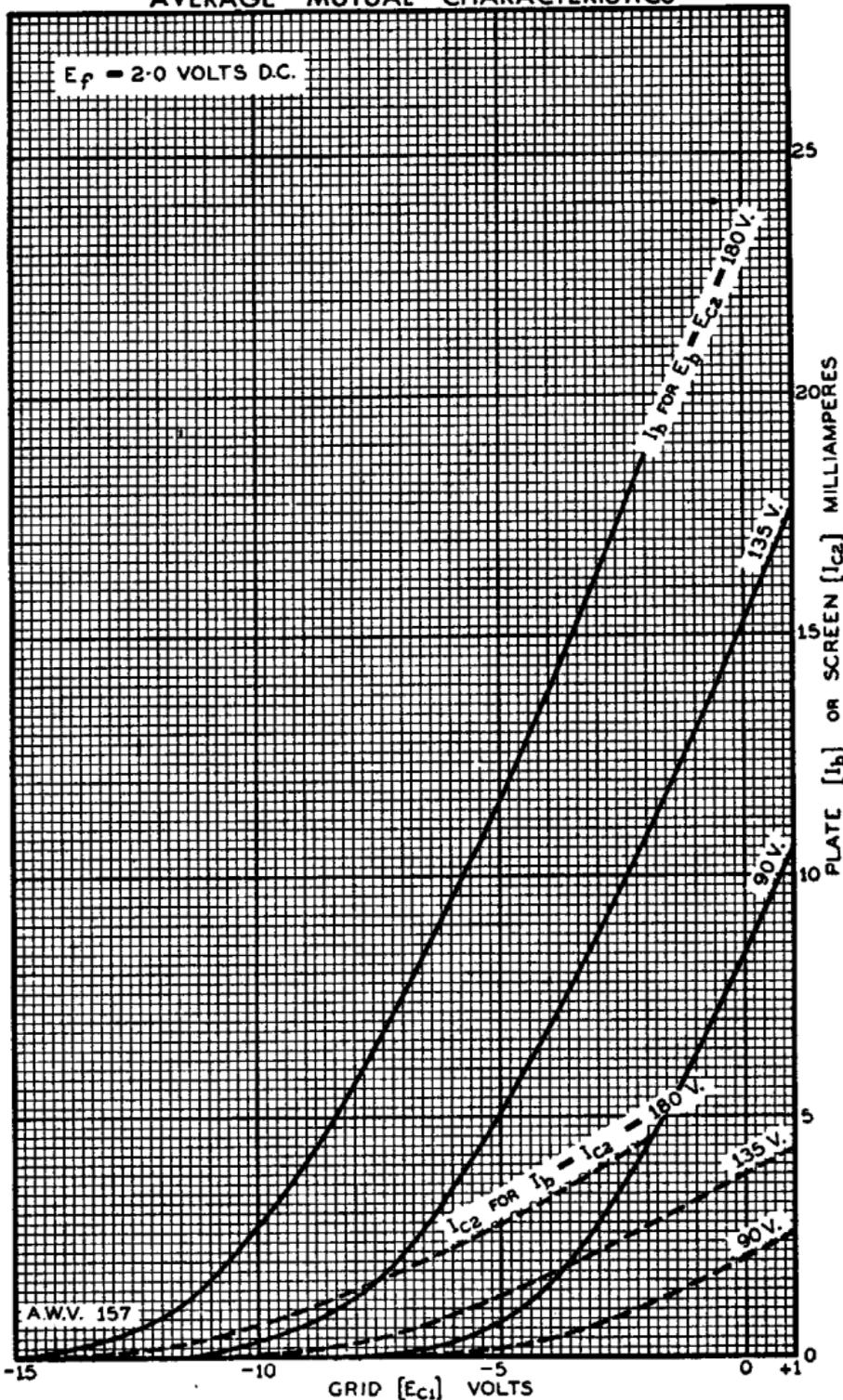
A.W.V. 156

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1L5-G

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SHEET 3

AVERAGE MUTUAL CHARACTERISTICS

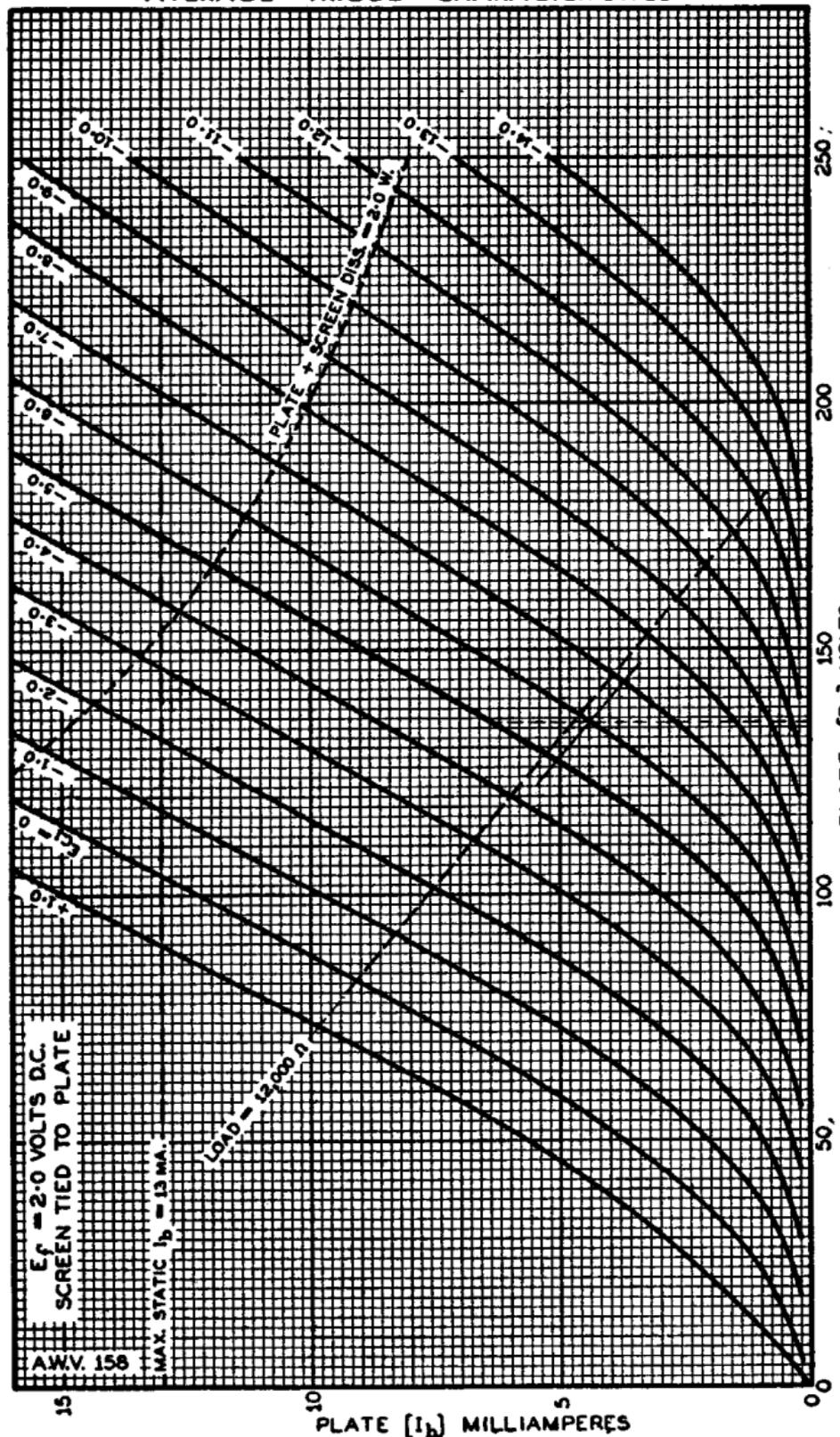


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AVERAGE TRIODE CHARACTERISTICS



$E_f = 2.0$ VOLTS D.C.
SCREEN TIED TO PLATE

MAX. STATIC $I_b = 13$ MA.

LOAD = 12,000 Ω

AWV 158

15

10

5

PLATE [I_b] MILLIAMPERES

0

50

100

150

200

250

PLATE [E_b] VOLTS

PLATE * SCREEN DIS. = 2.0"