



2A3

2A3 POWER TRIODE

GENERAL DATA

Electrical:

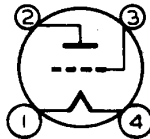
Filament, Coated:	
Voltage	2.5 ac or dc volts
Current	2.5 amp
Direct Interelectrode Capacitances (Approx.):*	
Grid to Plate	16.5 μ f
Grid to Cathode	7.5 μ f
Plate to Cathode	5.5 μ f

* With no external shield.

Mechanical:

Mounting Position	Any ←
Maximum Overall Length	5-3/8"
Maximum Seated Length	4-3/4"
Maximum Diameter	2-1/16"
Bulb	ST-16
Base	Medium-Shell Small 4-Pin
Basing Designation for BOTTOM VIEW	4D

Pin 1 - Filament
Pin 2 - Plate



Pin 3 - Grid
Pin 4 - Filament

AMPLIFIER - Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	300 max. volts
PLATE DISSIPATION	15 max. watts

Typical Operation and Characteristics:

Plate Voltage	250 . . volts
Grid Voltage [#] Δ	-45 . . volts
Amplification Factor	4.2
Plate Resistance	800 . . ohms
Transconductance	5250 . . μ mhos
Plate Current	60 . . ma.
Load Resistance	2500 . . ohms
Second Harmonic Distortion	5 . . %
Power Output	3.5 . . watts

Maximum Circuit Values:[□]

Grid-Circuit Resistance	{ fixed bias 0.05 max. megohm
	{ cathode bias 0.5 max. megohm

[#], ^{Δ} , [□]: See next page.
← indicates a change.

2A3



2A3 POWER TRIODE

PUSH-PULL AMPLIFIER - Class AB₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300 max.	volts
PLATE DISSIPATION.	15 max.	watts

Typical Operation:

Values are for 2 tubes

	Fixed Bias	Cathode Bias	
Plate Voltage.	300	300 •	volts
Grid Voltage*	-62	-	volts
Cathode-Bias Resistor.	-	780	ohms
→ Peak AF Grid-to-Grid Voltage	124	156	volts
→ Zero-Signal Plate Current.	80	80	ma.
→ Max.-Signal Plate Current.	147	100	ma.
Effective Load Resistance (plate to plate)	3000	5000	ohms
Total Harmonic Distortion.	2.5	5.0	%
Power Output	15	10	watts

Maximum Circuit Values: □

Grid-Circuit Resistance. . .	{ fixed bias 0.05 max. megohm
	{ cathode bias 0.5 max. megohm

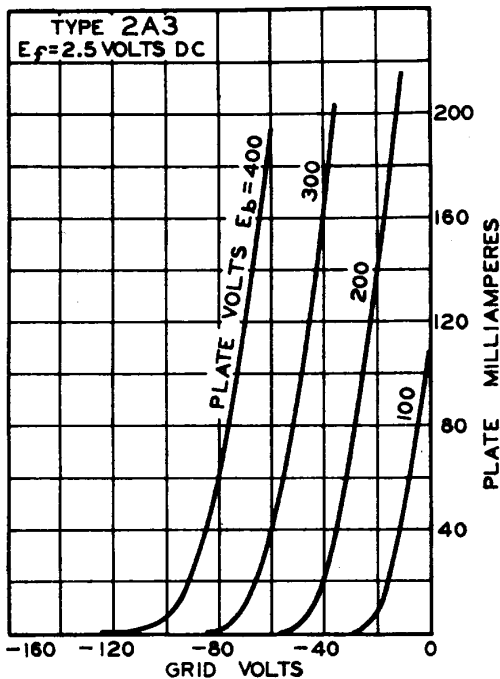
* Grid voltage referred to mid-point of ac-operated filament.

▲ When a single 2A3 is operated cathode-biased, the cathode-biasing resistor value should be 750 ohms.

□ The type of coupling used should not introduce too much resistance in the grid circuit. Transformer or impedance-coupling devices are recommended.

• For zero-signal conditions.

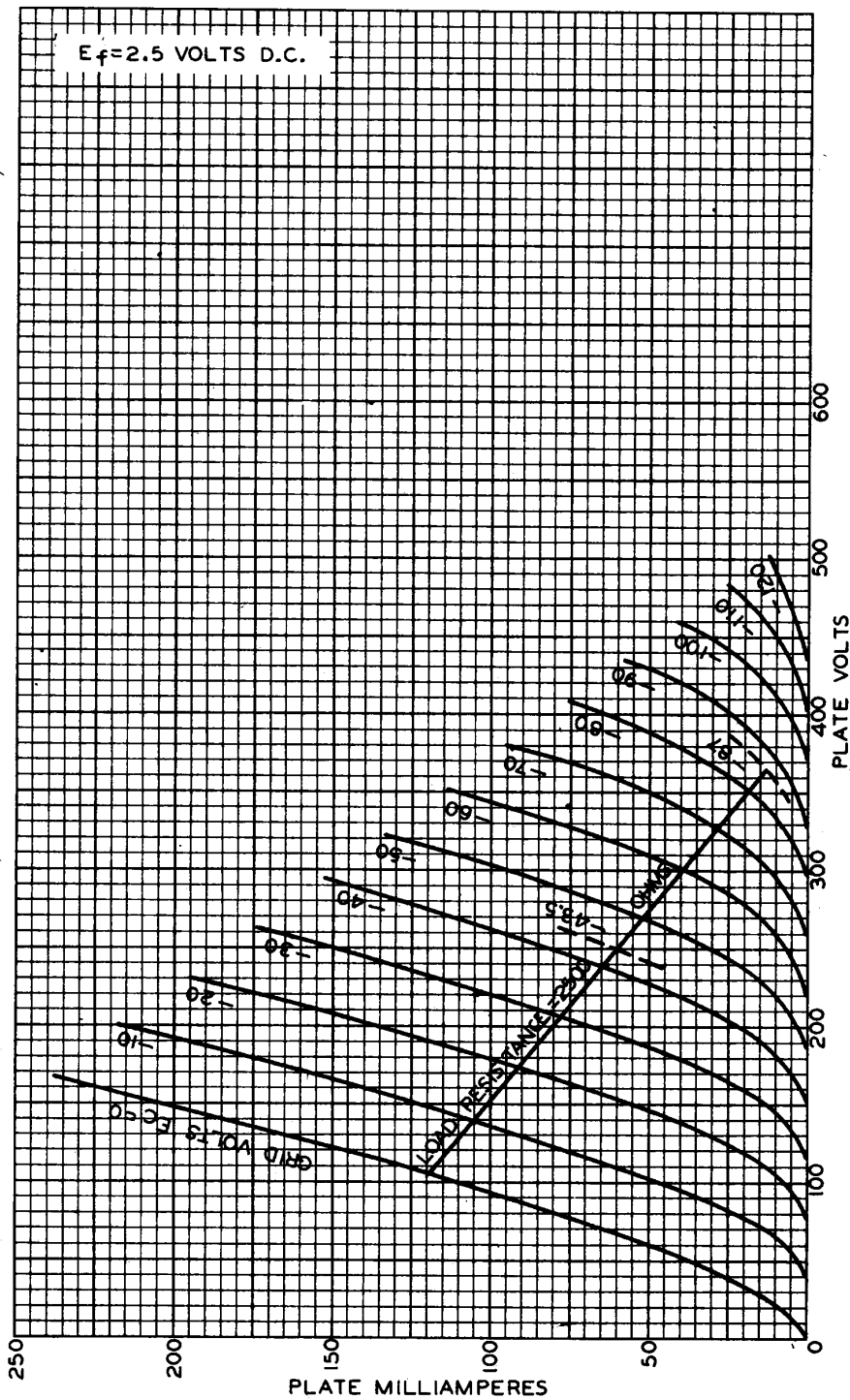
AVERAGE CHARACTERISTICS



→ Indicates a change.

92CM-5328T

AVERAGE PLATE CHARACTERISTICS



MARCH 9, 1933

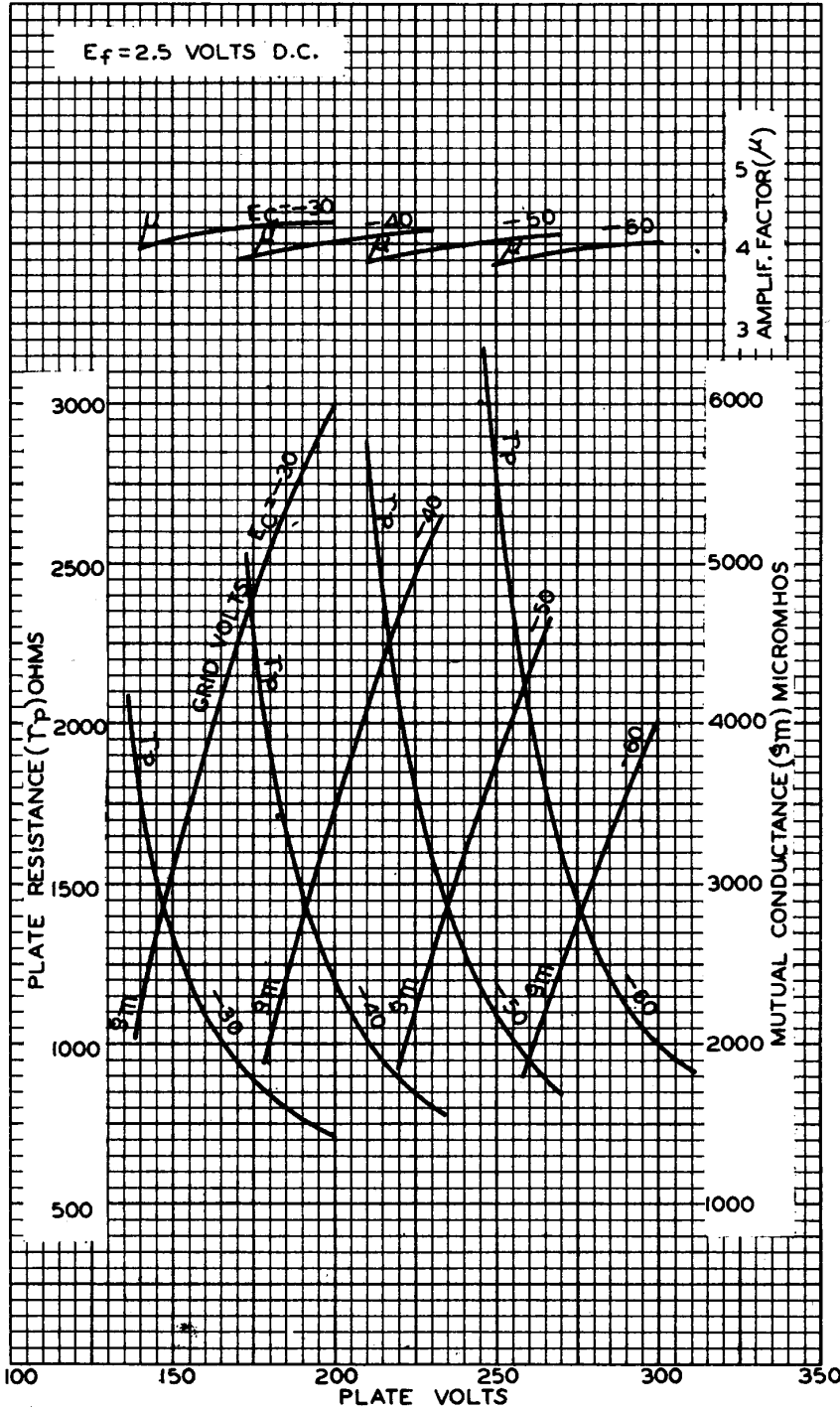
RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

925-5233RI

2A3



AVERAGE CHARACTERISTICS



JUNE 12, 1933

RCA RADIOTRON DIVISION
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925-5326R1