



2A3

2A3 POWER TRIODE

GENERAL DATA

Electrical:

Filament, Coated:

Voltage	2.5	ac or dc volts
Current	2.5	amp

Direct Interelectrode Capacitances (Approx.):*

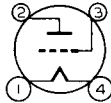
Grid to Plate	16.5	μf
Grid to Cathode	7.5	μf
Plate to Cathode	5.5	μf

* 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* \blacktriangle	-45	volts
Amplification Factor	4.2	
Plate Resistance	800	ohms
Transconductance	5250	μmhos
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

* \blacktriangle , \square : 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

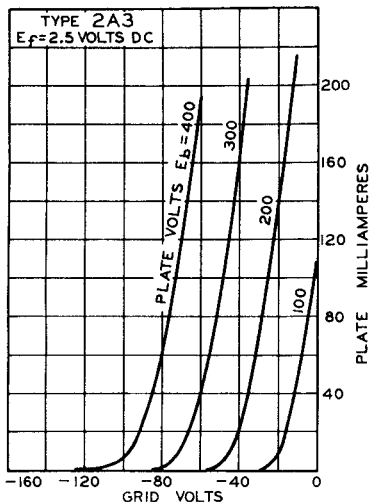
* Grid voltage referred to mid-point of ac-operated filament.

▲ 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.

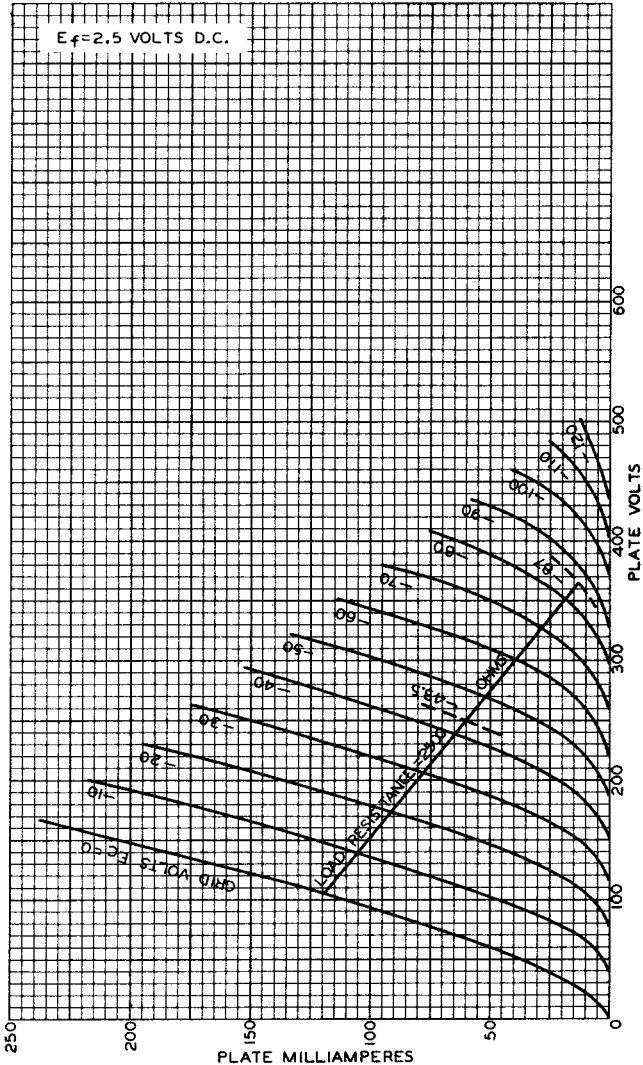
• For zero-signal conditions.

AVERAGE CHARACTERISTICS



→ Indicates a change.

AVERAGE PLATE CHARACTERISTICS

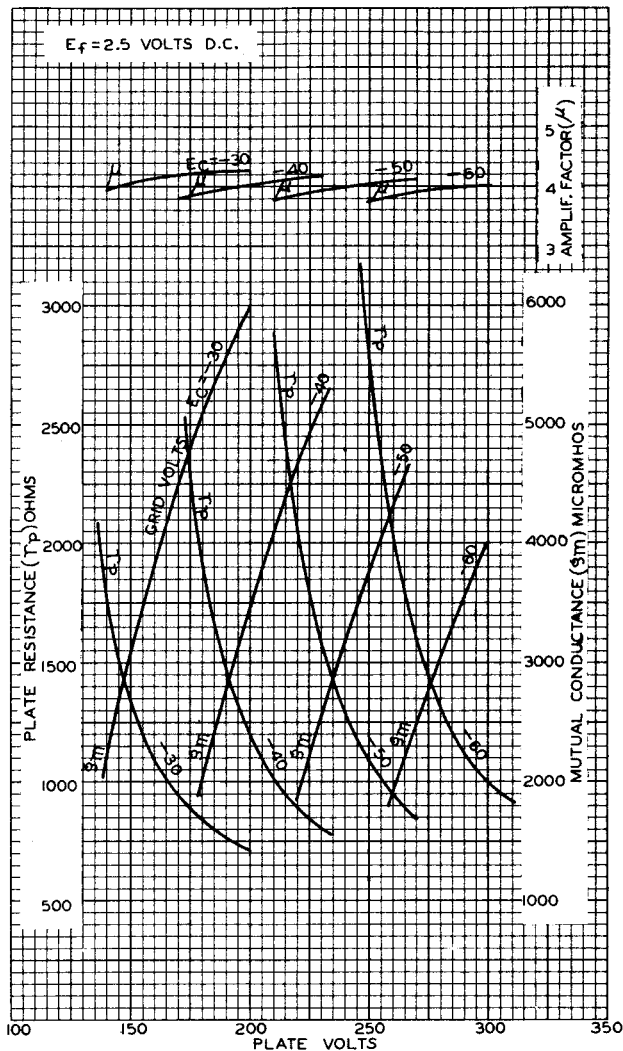


2A3


Cunningham
Radiotron


RCA-2A3

AVERAGE CHARACTERISTICS



JUNE 12, 1933

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

925-5326RI