



2A3

2A3 POWER TRIODE

GENERAL DATA

Electrical:

Filament, Coated:

Voltage 2.5 ac or dc volts
 Current 2.5 amp

Direct Interelectrode Capacitances (Approx.):*

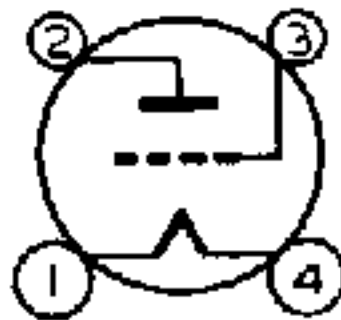
Grid to Plate 16.5 μf
 Grid to Cathode 7.5 μf
 Plate to Cathode 5.5 μf

* 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[#] -45 . . . volts
 Amplification Factor 4.2
 Plate Resistance 800 . . . ohms
 Transconductance 5250 . . . μhos
 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

[#], [▲], [□]: 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

	<u>Fixed Bias</u>	<u>Cathode Bias</u>	
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
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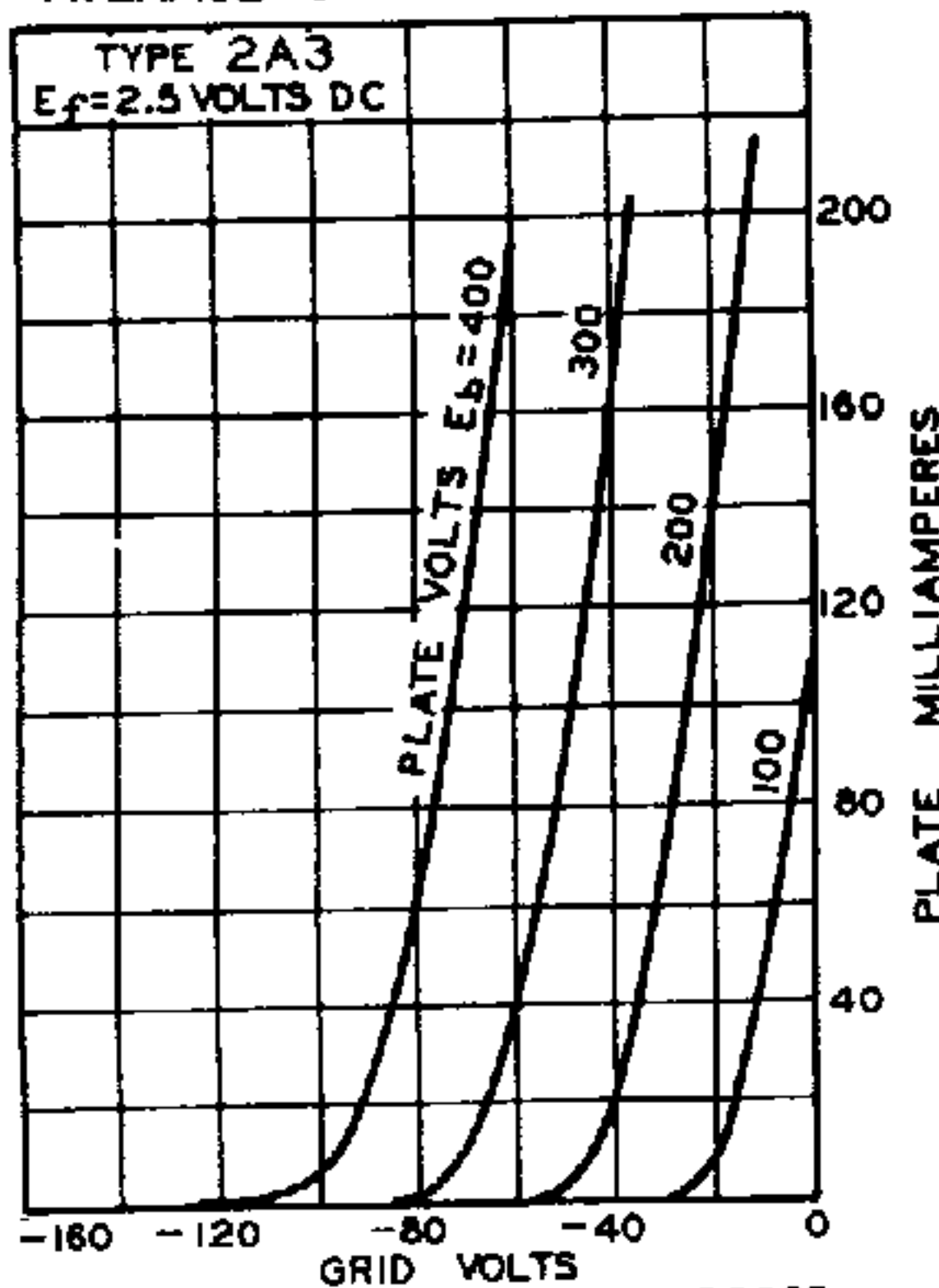
* Grid voltage referred to mid-point of ac-operated filament.

• 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.

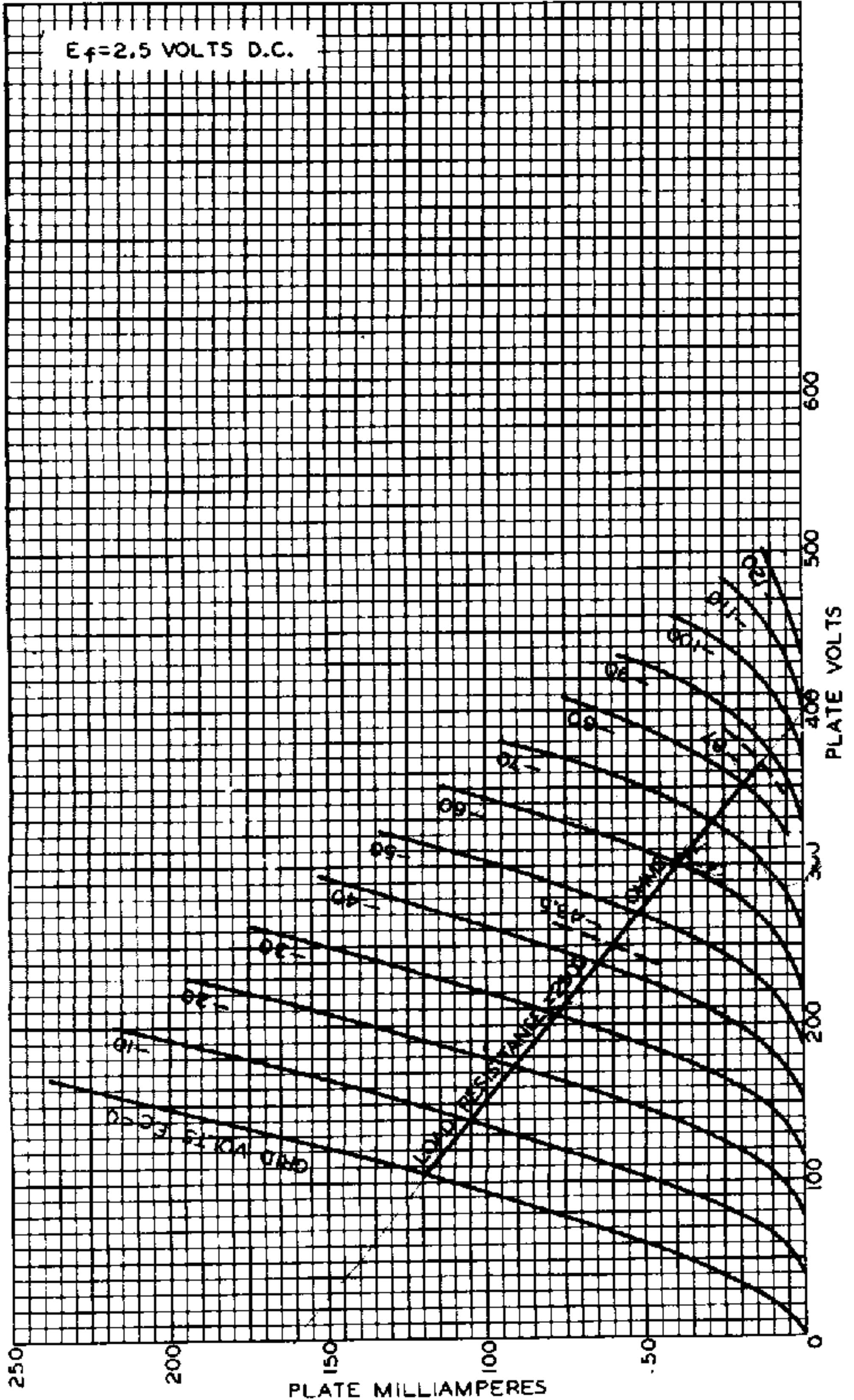
• For zero-signal conditions.

AVERAGE CHARACTERISTICS



→ Indicates a change.

AVERAGE PLATE CHARACTERISTICS



AVERAGE CHARACTERISTICS

