



ELECTRONIC TUBE REFERENCE

247A

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Western Electric general-purpose heater-cathode triode with published Class A operating data for signal and audio amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	2 V / 1.6 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	16000 Ω
TRANSCONDUCTANCE	0.00094 S
AMPLIFICATION FACTOR	14.6
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Promoted fields mapped from published ratings/characteristics; additional published values preserved in parameter table.</i>	

Western Electric general-purpose triode with a 2.0 V, 1.6 A heater-type cathode and a published Class-A operating point.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1933 Western Electric Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1933 WESTERN ELECTRIC TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-grid capacitance	3.2 pF	Published direct interelectrode capacitance
Plate-cathode capacitance	2.7 pF	Published direct interelectrode capacitance
Grid-cathode capacitance	4 pF	Published direct interelectrode capacitance



SOURCE OPERATING CONDITIONS

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1956 Western Electric Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1956 WESTERN ELECTRIC TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	2 V	—
Heater Current	1.6 A	—
Maximum Plate Voltage	200 V	—
Maximum Plate Dissipation	1 W	—
Maximum Heater-Cathode Voltage	100 V	—
Plate Voltage	135 V	ClassA
Plate Current	3.2 mA	ClassA
Power Output	0.037 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	15.2	ClassA
Transconductance	940 μ S	ClassA
Plate Resistance	16000 ohm	ClassA



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Western Electric 200s

Published test conditions and operating points. Values on this page are preserved as reported by this source.

2026 WESTERN ELECTRIC 200S

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	2 Volt	Heater Voltage 2 Volts, AC or DC
Plate Voltage	1 Volt	Plate Voltage 1 3 . 5 1 8 0 Vo l t s
Average Plate Resistance	16200 Ohms	Average Plate Resistance.... 16,200 16,000 Ohms
Average Amplification Factor	14.9	Average Amplification Factor 14.9 14.6
Heater voltage	2 volt	Heater voltage 2.0 volts, a.c. or d.c.
Nominal heater current	1.6 amperes	Nominal heater current 1.6 amperes
within the area, ABCD, in Figure	3	within the area, ABCD, in Figure 3. Amplification factor, plate resistance, transconductance, and
Microphonic and Sputter Noise—With a plate voltage of	135 volt	Microphonic and Sputter Noise—With a plate voltage of 135 volts, a grid bias of —4.5 volts,
and a load resistance of	100000 ohms	and a load resistance of 100,000 ohms, the mean microphonic noise output level of the 247A tube,
HEATER VOLTAGE =	2 VOLT	HEATER VOLTAGE = 2.0VOLTS

TUBE TINKER

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and their source documents.

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