



ELECTRONIC TUBE REFERENCE

231D

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Western Electric low-filament-power directly heated triode for professional signal amplification and general electronic service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	3.1 V / 60 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	14600 Ω
TRANSCONDUCTANCE	0.00051 S
AMPLIFICATION FACTOR	7.8
MAXIMUM PLATE VOLTAGE	150 V
<i>Promoted fields mapped from published ratings/characteristics; additional published values preserved in parameter table.</i>	

The Western Electric 231D is a triode listed in the supplied catalog table.



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-filament capacitance	2.5 pF	Published direct interelectrode capacitance
Grid-filament capacitance	2.4 pF	Published direct interelectrode capacitance



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum/Typical Power Output	0.0045 W	Catalog-table value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	150 V	Catalog-table value



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
Filament Voltage	2.9 Volt	Filament Voltage 2.9 to 3.4 Volts, DC
Average Filament Current	0.06 Ampere	Average Filament Current 0.060 Ampere
Grid Voltage	-3 Volt	Grid Voltage —3.0 —7.5 Volts
Average Plate Current	2 Milliampere	Average Plate Current 2 2.5 Milliampere
Average Plate Resistance	15600 Ohms	Average Plate Resistance 15,600 14,600 Ohms
Average A m p l i f i c a t i o n Factor	7.8	Average A m p l i f i c a t i o n Factor 7.8 7.8
Filament current	0.06 ampere	Filament current 0.060 ampere, d.c.
Nominal fi l a m e n t voltage	3.1 volt	Nominal fi l a m e n t voltage 3.1 volts
characteristics as functions of plate voltage are shown in Figure	7 volt	characteristics as functions of plate voltage are shown in Figure 7 for several values of grid voltage.
cluded within the area, ABCD, in Figure	3	cluded within the area, ABCD, in Figure 3. Amplification factor, plate resistance, transconductance,
Microphonic Noise—With a plate voltage of	90 volt	Microphonic Noise—With a plate voltage of 90 volts, a grid bias of —3 volts, and a load
resistance of	100000 ohms	resistance of 100,000 ohms, the mean mic ophonic noise output level of the 231D tube, measured in
FILAMENT CURRENT =	0.06 AMPERE	FILAMENT CURRENT = 0.060 AMPERE D.C. :iii:S:3SSi
FILAMENT CURRENT =	0.06 AMPERE	FILAMENT CURRENT = 0.060 AMPERE D.C

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	90 Volt	Plate Voltage 90 135 Volts Maximum



TUBE TINKER

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and their source documents.

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