



ELECTRONIC TUBE REFERENCE

71A

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Directly heated power-amplifier triode retained chiefly for replacement in older receivers; published audio output is below the project's 5-watt power-category gate.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4	BASE PINS	4
NOMINAL HEATER	5 V / 250 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	1750 Ω
TRANSCONDUCTANCE	0.0017 S
AMPLIFICATION FACTOR	3
MAXIMUM PLATE VOLTAGE	180 V
<i>Published ratings and characteristics promoted from the approved datasheet.</i>	

Directly heated power-amplifier triode retained chiefly for replacement in older receivers. The French-language source has been translated to English.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1932 Cunningham Radio Tubes

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

1932 CUNNINGHAM RADIO TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	7.4 pF	Published direct interelectrode capacitance
Grid-filament capacitance	3.7 pF	Published direct interelectrode capacitance
Plate-filament capacitance	2.1 pF	Published direct interelectrode capacitance
Load resistance	3200 ohm	Published operating characteristic

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Raytheon Radio Receiving Tubes

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	80 V	ClassA
Control-grid voltage	-16.5 V	ClassA
Plate current	10 mA	ClassA
Load resistance	3000 Ω	80VPlate
Power output	125 mW	80VPlate
Plate voltage	135 V	ClassA
Control-grid voltage	-27 V	ClassA
Plate current	17.3 mA	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load resistance	3000 Ω	135VPlate
Power output	400 mW	135VPlate
Plate voltage	180 V	ClassA
Control-grid voltage	-40.5 V	ClassA
Plate current	20 mA	ClassA
Load resistance	4800 Ω	180VPlate
Power output	790 mW	180VPlate

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	2170 Ω	80VPlate
Transconductance	1400 μ S	80VPlate
Amplification factor	3	Section1
Plate resistance	1820 Ω	135VPlate
Transconductance	1650 μ S	135VPlate
Plate resistance	1750 Ω	180VPlate
Transconductance	1700 μ S	180VPlate


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

193X Cunningham

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

193X CUNNINGHAM

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	5 V	Published nominal
Heater/filament current	250 mA	Published nominal
Transconductance	1650 μ S	Published characteristic
Amplification factor	3	Published characteristic
Plate resistance	1820 Ohm	Published characteristic



SOURCE OPERATING CONDITIONS

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1940 RCA

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

1940 RCA

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	5 V	Published nominal value
Heater or filament current	250 mA	Published nominal/aggregate value
Transconductance	1700 μ S	Published operating characteristic
Amplification factor	3	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Audio power output	0.79 W	180 V plate, published output-stage condition



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	180 V	—
Anode Current	20 mA	—
Control Grid Voltage	-40.5 V	—
Optimum Load	4800 ohm	—
Power Output	0.8 W	—



SOURCE OPERATING CONDITIONS

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1950 Sylvania

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

1950 SYLVANIA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	5 V	—
Heater Current	250 mA	—



SOURCE OPERATING CONDITIONS

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1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	180 V	ClassA
Power Output	0.79 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	20 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	7.5 pF	—