

ELECTRONIC TUBE REFERENCE

6A3

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Directly heated low-mu audio power triode for final output stages in AC receivers and amplifiers. Approximately 15 W plate dissipation and high transconductance support several watts of single-ended Class A output as well as push-pull audio service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4D	BASE PINS	4
NOMINAL HEATER	6.3 V / 1 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	800 Ω
TRANSCONDUCTANCE	0.00525 S
AMPLIFICATION FACTOR	4.2
MAXIMUM PLATE VOLTAGE	325 V
MAXIMUM PLATE DISSIPATION	15 W
MAXIMUM CATHODE CURRENT	100 mA
Published promoted fields populated from the datasheet; identical repeated sections compressed where applicable.	

Power triode intended for the final stage of AC receivers or amplifiers, providing substantial Class-A output and usable in push-pull operation.

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	16 pF	Section1
Input capacitance	7 pF	Section1
Output capacitance	5 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Control-grid voltage	-45 V	ClassA
Plate current	60 mA	ClassA
Load resistance	2500 Ω	ClassA
Power output	3.2 W	ClassA
Plate voltage	325 V	ClassAB;PushPull;TwoTubes
Control-grid voltage	-68 V	ClassAB;PushPull;TwoTubes
Load resistance plate-to-plate	3000 Ω	ClassAB;PushPull;TwoTubes;FixedBias
Power output	15 W	ClassAB;PushPull;TwoTubes;FixedBias

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	800 Ω	Section1
Transconductance	5250 μ S	Section1
Amplification factor	4.2	Section1



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	250 V	ClassA
Anode Current	60 mA	ClassA
Control Grid Voltage	-45 V	ClassA
Cathode Bias Resistor	750 ohm	ClassA
Optimum Load	2500 ohm	ClassA
Power Output	3.5 W	ClassA
Anode Voltage	325 V	ClassAB; TwoTubes
Anode Current	60 mA	ClassAB; TwoTubes
Control Grid Voltage	-68 V	ClassAB; TwoTubes
Cathode Bias Resistor	850 ohm	ClassAB; TwoTubes
Optimum Load	5000 ohm	ClassAB; TwoTubes
Power Output	10 W	ClassAB; TwoTubes



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	800 ohm	—
Transconductance	5250 μ S	—
Amplification Factor	4.2	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	325 V	—
Class A Plate Voltage	250 V	—
Class A Plate Current	60 mA	—
Class A Load Resistance	2500 ohm	—
Class A Power Output	3.2 W	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	325 V	Published handbook rating
Plate voltage	250 V	ClassA
Control-grid bias	45 V	ClassA
Plate current	60 mA	ClassA
Load resistance	2500 ohm	ClassA
Power output	3.2 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	800 ohm	Published handbook characteristic
Transconductance	5250 μ S	Published handbook characteristic
Amplification factor	4.2	Published handbook characteristic
Heater/filament voltage	6.3 V	Published heater/filament rating
Heater/filament current	1 A	Published heater/filament rating



SOURCE DATA APPENDIX

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
Power Output	3.5 W	ClassA1
Total Harmonic Distortion	5 %	ClassA1



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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2026 Sovtek

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

2026 SOVTEK

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	60 mA	Plate 250 V; ClassA;OneTube
Power Output	3 W	Plate 250 V; Load 2.5 kohm; ClassA;OneTube

TUBE TINKER

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and their source documents.

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