

ELECTRONIC TUBE REFERENCE

43

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Power-output pentode designed for audio stages in AC/DC receivers. Its heater and operating characteristics suit transformerless mains-powered equipment requiring dedicated low-frequency output power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6B	BASE PINS	7
NOMINAL HEATER	25 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	45000 Ω
TRANSCONDUCTANCE	0.002 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	60 mA
Published promoted fields populated by semantic headings; identical repeated sections compressed.	

Power-output pentode intended for AC/DC receiver audio-output stages.

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	160 V	ClassA
Screen Voltage	120 V	ClassA
Grid Voltage	-18 V	ClassA
Plate Current	33 mA	ClassA
Screen Current	6.5 mA	ClassA
Load Resistance	5000 ohm	ClassA
Power Output	2.2 W	ClassA

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	25 V	Nominal
HeaterCurrentNominal	300 mA	Nominal
Maximum Plate Voltage	200 V	—
Maximum Screen Voltage	200 V	—
Maximum Plate Dissipation	9 W	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Cathode Current	60 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2000 μ S	Typical


SOURCE DATA APPENDIX

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	135 V	Point1
Plate Voltage	160 V	Point2
Plate Current	37 mA	Point1
Plate Current	33 mA	Point2
Screen Voltage	135 V	Point1
Screen Voltage	120 V	Point2
Power Output	2 W	Point1
Power Output	2.2 W	Point2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	35000 ohm	Point1
Plate Resistance	42000 ohm	Point2
Transconductance	2450 μ S	Point1
Transconductance	2400 μ S	Point2


SOURCE DATA APPENDIX

1950 Sylvania

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

1950 SYLVANIA
Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2450 μ S	—



SOURCE DATA APPENDIX

1958 Brimar Radio Valve No 7

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1958 BRIMAR RADIO VALVE NO 7
Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	160 V	—
Anode Current	33 mA	—
Screen Voltage	120 V	—
Screen Current	6.5 mA	—
Control Grid Voltage	-18 V	—
Optimum Load	5000 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	2.2 W	ClassA



SOURCE DATA APPENDIX

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

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	160 V	ClassA
Screen Voltage	120 V	ClassA
Grid Voltage	-18 V	ClassA
Plate Current	33 mA	ClassA
Screen Current	6.5 mA	ClassA
Load Resistance	5000 ohm	ClassA
Power Output	2.2 W	ClassA



SOURCE DATA APPENDIX

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 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	35000 ohm	Typical
Transconductance	2450 uS	Typical

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	2.2 W	Typical



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and their source documents.

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