

ELECTRONIC TUBE REFERENCE

1S4

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Power/output pentode designed for Class-A, single-ended, or push-pull audio-frequency output amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AV	BASE PINS	7
NOMINAL HEATER	1.4 V / 100 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7AV - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G1	A	G1 – Control Grid	CONNECTED
PIN4 – G2	A	G2 – Screen Grid	CONNECTED
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – F	–	F – Filament	CONNECTED
PIN6 – P	A	P – Plate (Anode)	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.001575 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	67.5 V
MAXIMUM CATHODE CURRENT	11 mA
<i>Power-amplifier pentode for battery-operated audio output stages.</i>	

Power-amplifier pentode for battery-operated audio output stages. Electrical ratings and representative operating data were extracted from the approved manual page.



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	1.4 V	—
HeaterOrFilamentCurrent	100 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Referenced Characteristics	Type 3S4, parallel filament connection	Source explicitly refers to 3S4; values not invented



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	90 V	ClassA; OperatingPoint1
Screen voltage	67.5 V	ClassA; OperatingPoint1
Control-grid bias	7 V	ClassA; OperatingPoint1
Plate current	7.4 mA	ClassA; OperatingPoint1
Screen current	1.4 mA	ClassA; OperatingPoint1
Load resistance	8000 ohm	ClassA; OperatingPoint1
Power output	0.27 W	ClassA; OperatingPoint1
Plate voltage	67.5 V	ClassA; OperatingPoint2
Screen voltage	67.5 V	ClassA; OperatingPoint2
Control-grid bias	7 V	ClassA; OperatingPoint2
Plate current	7.2 mA	ClassA; OperatingPoint2
Screen current	1.5 mA	ClassA; OperatingPoint2
Load resistance	5000 ohm	ClassA; OperatingPoint2
Power output	0.18 W	ClassA; OperatingPoint2
Plate voltage	45 V	ClassA; OperatingPoint3
Screen voltage	45 V	ClassA; OperatingPoint3
Control-grid bias	4.5 V	ClassA; OperatingPoint3
Plate current	3.8 mA	ClassA; OperatingPoint3
Screen current	0.8 mA	ClassA; OperatingPoint3
Load resistance	8000 ohm	ClassA; OperatingPoint3
Power output	0.065 W	ClassA; OperatingPoint3

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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