

ELECTRONIC TUBE REFERENCE

7H7

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Lock-In semi-remote-cutoff pentode suitable for RF or television service. Its rugged short-lead construction combines controlled-gain high-frequency amplification with improved mechanical stability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8V	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

8V - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – H	–	H – Heater	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G2	A	G2 – Screen Grid	CONNECTED
PIN4 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – IS	A	IS – Internal Screen	CONNECTED
PIN6 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – K	A	K – Cathode	CONNECTED
PIN8 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	800000 Ω
TRANSCONDUCTANCE	0.0045 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.7 W
<i>Published promoted fields populated by semantic heading; identical repeated physical sections compressed.</i>	

A semi-remote-cutoff pentode suitable for RF or television service, using Lock-In construction for ruggedness and short leads.



SOURCE OPERATING CONDITIONS

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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	250 V	—
Plate Current	9.5 mA	—
Screen Voltage	150 V	—
Screen Current	3.5 mA	—
Control Grid Voltage	-2.5 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	0.8 Mohm	—
Transconductance	3800 μ S	—
Grid Voltage at 5 μ S	-19 V	—



SOURCE OPERATING CONDITIONS

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1950 Sylvania

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1950 SYLVANIA

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	7 V	Nominal
HeaterCurrentNominal	320 mA	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Screen Voltage	150 V	ClassA


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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
Cutoff characteristic	Variable-mu	—


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195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	8 pF	—
Output capacitance	7 pF	—
Grid-to-plate capacitance	0.004 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA;CathodeBias

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen-grid voltage	150 V	ClassA;CathodeBias
Cathode resistor	180 ohm	ClassA;CathodeBias
Plate current	10 mA	ClassA;CathodeBias
Screen-grid current	3.2 mA	ClassA;CathodeBias
Plate voltage	100 V	ClassA;PlateVoltage=100V
Screen-grid voltage	100 V	ClassA;PlateVoltage=100V
Grid voltage	-1.5 V	ClassA;PlateVoltage=100V
Plate current	7.5 mA	ClassA;PlateVoltage=100V
Screen-grid current	2.6 mA	ClassA;PlateVoltage=100V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	800000 ohm	ClassA;PlateVoltage=250V
Transconductance	4000 uS	ClassA;PlateVoltage=250V
Plate resistance	350000 ohm	ClassA;PlateVoltage=100V
Transconductance	4000 uS	ClassA;PlateVoltage=100V



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1961 Tung Sol

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1961 TUNG SOL

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	800000 ohm	Typical
Transconductance	4500 uS	Typical