

ELECTRONIC TUBE REFERENCE

7B7

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Single-ended Lock-In remote-cutoff pentode for RF or IF service in AC, AC/DC, and automobile receivers. Its variable-mu characteristic provides controlled gain across diverse receiver power systems.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8V	BASE PINS	8
NOMINAL HEATER	6.3 V / 150 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	750000 Ω
TRANSCONDUCTANCE	0.00175 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.5 W
<i>Published promoted fields populated by semantic heading; identical repeated physical sections compressed.</i>	

A single-ended remote-cutoff RF pentode of Lock-In design for RF or IF service in AC, AC/DC, and automobile receivers.



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	250 V	—
Anode Current	8.5 mA	—
Screen Voltage	100 V	—
Screen Current	2 mA	—
Control Grid Voltage	-3 V	—
Cathode Bias Resistor	300 ohm	—
Control Grid Voltage for Low Transconductance	-40 V	Transconductance=0.005mA/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	160 mA	Nominal
Plate Voltage	250 V	ClassA
Screen Voltage	100 V	ClassA



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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

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	5 pF	Section1
Output capacitance	6 pF	Section1
Grid-to-plate capacitance	0.004 pF	Section1

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate voltage	250 V	ClassA
Typical screen voltage	100 V	ClassA
Typical grid voltage	-3 V	ClassA
Typical plate current	8.5 mA	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical screen current	1.7 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	750000 Ohm	Section1
Transconductance	1750 uS	Section1



SOURCE OPERATING CONDITIONS

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1961 Tung Sol

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1961 TUNG SOL
Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	0.007 pF	Maximum

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1750 uS	Typical