

ELECTRONIC TUBE REFERENCE

6U7G

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Remote-cutoff high-frequency pentode designed for RF amplification. Its variable-mu characteristic supports automatic gain control in receiver front-end stages across a broad range of signal levels.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7R	BASE PINS	7
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7R - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – SH	A	SH – Internal Shield	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – P	A	P – Plate (Anode)	CONNECTED
PIN4 – G2	A	G2 – Screen Grid	CONNECTED
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – K	A	K – Cathode	CONNECTED
CAP1 – G1	A	G1 – Control Grid	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	800000 Ω
TRANSCONDUCTANCE	0.0016 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	2.25 W
MAXIMUM SCREEN DISSIPATION	0.25 W
<i>Remote-cutoff RF pentode section.</i>	

Remote-cutoff high-frequency pentode for RF amplification.

SOURCE OPERATING CONDITIONS

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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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.007 pF	Section1
Input capacitance	4.8 pF	Section1
Output capacitance	9 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	ClassA
Screen voltage	100 V	ClassA
Grid bias	-3 V	ClassA
Plate current	8 mA	ClassA
Screen current	2.2 mA	ClassA
Plate voltage	250 V	ClassA
Screen voltage	100 V	ClassA
Plate current	8.2 mA	ClassA
Screen current	2 mA	ClassA
Plate voltage	250 V	Mixer
Screen voltage	100 V	Mixer
Grid bias	-10 V	Mixer

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	260000 Ω	100VPlate
Transconductance	1500 μS	100VPlate
Plate resistance	800000 Ω	250VPlate

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1600 μ S	250VPlate


SOURCE DATA APPENDIX

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1938 Raytheon

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1938 RAYTHEON

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
EXTERNAL N Heater Voltage	6.3 V	EXTERNAL N Heater Voltage 6.3 volts
REQUIRED) I Heater Current	300 mA	REQUIRED) I Heater Current 0.3 ampere
Screen 100	100 V	Screen 100 100 volts
Plate Resistance .25	0.8 M Ω	Plate Resistance .25 0.8 megohms
Mutual Concéuctance 1500	1500 μ S	Mutual Concéuctance 1500 1500 umhos
Ccenductance 2 Uphos	-50 V	Ccenductance 2 Uphos -50 -50 volts
swing	1 V	swing 1 volt less than grid bias.


SOURCE DATA APPENDIX

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—



SOURCE OPERATING CONDITIONS

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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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
Anode Voltage	250 V	—
Transconductance	1600 μ S	—
ControlGridBiasForLowGm	-50 V	—



SOURCE OPERATING CONDITIONS

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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	9 pF	—
Grid-plate capacitance	0.007 pF	—

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

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen voltage	100 V	ClassA
Grid voltage	-3 V	ClassA
Plate current	8.2 mA	ClassA
Screen current	2 mA	ClassA

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	800000 ohm	ClassA
Transconductance	1600 uS	ClassA

TUBE TINKER

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and their source documents.

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