



ELECTRONIC TUBE REFERENCE

6DA6

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

High-gain remote-cutoff pentode for variable-gain RF and IF amplification in receiver and communications equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9BA	BASE PINS	9
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.0036 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2.25 W
MAXIMUM SCREEN DISSIPATION	0.45 W
MAXIMUM CATHODE CURRENT	16.5 mA
Remote-cutoff RF pentode for variable-gain Class-A amplifier service.	

High-gain remote-cutoff pentode for RF and IF amplifier service.



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	200 mA	—
EquivalentType	EF89	—



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	100 V	ClassA
Control-grid bias magnitude	2 V	ClassA
Plate current	9 mA	ClassA
Screen current	3 mA	ClassA
Plate resistance	1000000 ohm	ClassA
Transconductance	3600 uS	ClassA

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	5.5 pF	—
Output capacitance	5.1 pF	—
Grid-to-plate capacitance	0.002 pF	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1963 Amperex Condensed

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1963 AMPEREX CONDENSED

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	RFIFAmplifier
Screen voltage	100 V	RFIFAmplifier
Control-grid voltage	-1.95 V	RFIFAmplifier
Plate current	9 mA	RFIFAmplifier
Screen current	3 mA	RFIFAmplifier
Application	High-gain remote-cutoff RF/IF pentode	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	900000 Ω	Section1
Transconductance	5000 μS	Section1


SOURCE DATA APPENDIX

1999 Philips 0-D

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

1999 PHILIPS 0-D
Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	200 mA	—
Transconductance	4000 uS	—
Plate resistance	0.8 MOhm	—
Grid No	100 volts	PublishedLine: Grid No.2 voltage 100. 85 100 volts
Grid No	0 volt	PublishedLine: Grid No.3 voltage 0 0 0 volt
Grid No	-1 volts	PublishedLine: Grid No.1 voltage -2 -1%) -1%*) volts
) in case of grid cwrrent piasing max	22 megohms	PublishedLine: ')in case of grid cwrrent piasing max, 22 megohms
increased to a value of	1.5 volts	PublishedLine: increased to a value of 1.5 volts at least..
Supply voltage	200 volts	PublishedLine: Supply voltage 250 200 volts
Grid No	0 volt	PublishedLine: Grid No.3 voliage 0 0 volt
Grid No	-20 volts	PublishedLine: Grid No.1 bias -1.55 -20 ~1.95 -20 volts
resistance	2500 ohms	PublishedLine: resistance 2400 - 2500 ~ ohms

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	300 V	—
Plate dissipation	2.25 W	—
Screen-grid voltage	300 V	—
Screen-grid dissipation	0.45 W	—
Cathode current	16.5 mA	—
Grid No	300 volts	PublishedLine: Grid No.2 voltage 300 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No	550 volts	PublishedLine: Grid No.2 voltage (without current) : 550 volts
Grid No	3 megohms	PublishedLine: Grid No.1 circuit resistance +) 3 megohms
cathode	20000 ohms	PublishedLine: : cathode 20,000 ohms
Voltage between heater and cathode	100 volts	PublishedLine: Voltage between heater and cathode 100 volts
Grid o	10000 ohms	PublishedLine: Grid o, 3 circuit resistance : 10,000 ohms
Supply Voltage	250 volts	PublishedLine: Supply Voltage' 250 . 250 250 250 volts
Plate resistor	0.1 megohm	PublishedLine: Plate resistor 0.22. 0.1 0.22 0.1 megohm
resistor	0.47 megohm	PublishedLine: resistor 0.68 0.27 1.0 0.47 megohm

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