ELECTRONIC TUBE REFERENCE

EF41

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Variable-mu voltage-amplifier pentode designed for RF and IF stages with automatic gain control. Its extended characteristic provides controlled receiver gain while maintaining useful high-frequency amplification.

General characteristics

BASE DESIGNATION	RIMLOCK	**BASE PINS**	8
NOMINAL HEATER	6.3 V / 200 mA	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Pentode

PLATE RESISTANCE	2000000 Ω
TRANSCONDUCTANCE	0.0022 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.4 W
MAXIMUM CATHODE CURRENT	15 mA

Published ratings/characteristics promoted from the approved source.

Variable-mu voltage-amplifier pentode for RF and IF stages with automatic gain control.

SOURCE OPERATING CONDITIONS

SOURCE PDF

1951 Mullard Valve and Service Manual

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

1951 MULLARD VALVE AND SERVICE MANUAL

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Cutoff characteristic	**Variable-mu**	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1953 La Radiotechnique

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

1953 LA RADIOTECHNIQUE

Section 1 · Pentode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
HeaterVoltageNominal	**6.3 V**	Nominal
HeaterCurrentNominal	**200 mA**	Nominal
Maximum Plate Voltage	**300 V**	—
Maximum Screen Voltage	**250 V**	—
Maximum Plate Dissipation	**1 W**	—

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Transconductance	**2200 µS**	Typical
Amplification Factor	**4400**	Typical

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	**2000000 ohm**	Typical

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
Heater Voltage	**6.3 V**	—
Heater Current	**200 mA**	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Pentode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	**6.3 V**	Published heater rating
Heater current	**200 mA**	Published heater rating

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	**250 V**	RForIFAmplifier
Grid bias	**-2.5 V**	RForIFAmplifier

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	**6 mA**	RForIFAmplifier
Maximum plate voltage	**300 V**	Published limit
Maximum plate dissipation	**2 W**	Published limit
Maximum screen voltage	**300 V**	Published limit

SOURCE OPERATING CONDITIONS

SOURCE PDF

1967 Mullard Receiving Tubes for Maintenance

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

1967 MULLARD RECEIVING TUBES FOR MAINTENANCE

Section 1 · Pentode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	**250 V**	RFOrIFAmplifier
Screen-grid resistor	**90 kOhm**	RFOrIFAmplifier
Cathode resistor	**325 Ohm**	RFOrIFAmplifier
Control-grid voltage	**-2.5 V**	RFOrIFAmplifier
Plate current	**6 mA**	RFOrIFAmplifier
Screen-grid current	**1.7 mA**	RFOrIFAmplifier
Transconductance	**2.2 mA/V**	RFOrIFAmplifier
Maximum plate voltage	**300 V**	—
Maximum plate dissipation	**2 W**	—
Maximum screen-grid voltage	**125 V**	Ia=6mA
Maximum screen-grid dissipation	**0.3 W**	—
Maximum cathode current	**10 mA**	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	**4.7 pF**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output capacitance	**8 pF**	—

SOURCE OPERATING CONDITIONS

SOURCE PDF

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Pentode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	**6.3 V**	Nominal
HeaterCurrentNominal	**200 mA**	Nominal
Maximum Plate Voltage	**300 V**	—
Maximum Screen Voltage	**250 V**	—
Maximum Plate Dissipation	**1 W**	—
Maximum Screen Dissipation	**0.4 W**	—
Maximum Cathode Current	**15 mA**	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	**2200 µS**	Typical
Amplification Factor	**4400**	Typical
Plate Resistance	**2000000 ohm**	Typical

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Heater voltage	**6.3 V**	—
Heater current	**200 mA**	—
Typical plate voltage	**250 V**	Uncontrolled
Typical screen voltage	**100 V**	Uncontrolled
Typical plate current	**6 mA**	Uncontrolled
Transconductance	**2200 uS**	Uncontrolled
Plate resistance	**1.1 Mohm**	Uncontrolled
Screen-grid amplification factor	**18**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum no-current plate voltage	**550 V**	—
Maximum plate voltage	**300 V**	—

CAPACITANCE		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate capacitance	**5.9 pF**	—
Grid input capacitance	**5.3 pF**	—
Plate-grid capacitance maximum	**0.002 pF**	—
Grid-heater capacitance maximum	**0.05 pF**	—

Tube Tinker

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

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