



ELECTRONIC TUBE REFERENCE

PL802

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

High-slope power pentode designed specifically for luminance and video-output amplification in color television receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B9A	BASE PINS	9
NOMINAL HEATER	16 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.04 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	6 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	100 mA
<i>Published ratings and characteristics promoted where clearly stated; identical repeated sections compressed when applicable.</i>	

High-slope luminance/video-output pentode for color television receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1967 Mullard Receiving and Amplifying Valves

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

1967 MULLARD RECEIVING AND AMPLIFYING VALVES

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	170 V	—
Screen-grid voltage	170 V	—
Grid voltage	-1.3 V	—
Plate current	30 mA	—
Screen-grid current	6.5 mA	—
Transconductance	40000 μ S	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	20 pF	—
Output capacitance	4 pF	—
Plate-grid capacitance	0.075 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	400 V	VideoOutput
Plate voltage at zero cathode current	550 V	VideoOutput
Screen-grid voltage at zero cathode current	550 V	VideoOutput
Output voltage peak-to-peak	140 V	VideoOutput
Maximum output current	7 mA	VideoOutput



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	16 V	Published nominal value
Heater current	300 mA	Published nominal value
Transconductance	40000 μ S	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	6 W	Published maximum rating
Application	Luminance/video output	Printed source application



SOURCE OPERATING CONDITIONS

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1973 Mazda Valves Binder 2

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

1973 MAZDA VALVES BINDER 2

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	16 V	Published nominal value
Heater current	300 mA	Published nominal value
Transconductance	40000 μ S	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	6 W	Published maximum rating



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current I,	30 mA	Anode current I, 30 mA
Transconductance S	40 mA	Transconductance S 40 mA/V
Anode dissipation Wa max	6 W	Anode dissipation Wa max. 6 W
Heater current I	300 mA	Heater current I 300 mA
Heater voltage Vs	16 V	Heater voltage Vs 16 V
Anode to all except grid No.1 Ca(gl)	4 pF	Anode to all except grid No.1 Ca(gl) 4 pF
Grid No.1 to all except anode Cgl(a)	20 pF	Grid No.1 to all except anode Cgl(a) 20 pF
Anode to grid No.1 Cagl	0.075 pF	Anode to grid No.1 Cagl 0.075 pF
Anode voltage v,	170 V	Anode voltage v, 170 V
Grid No.2 voltage Vg2	170 V	Grid No.2 voltage Vg2 170V
Grid No.2 current Ig2	6.5 mA	Grid No.2 current Ig2 6.5 mA
Anode supply voltage Vp, max	400 V	Anode supply voltage Vp, max. 400 V
Anode voltage, Vao max,	550 V	Anode voltage, Vao max, 550 V
Grid No.2 voltage Vgzo max	550 V	Grid No.2 voltage Vgzo max. 550 V
Anode dissipation Wy max	6 W	Anode dissipation Wy max. 6 W
Grid No.2 dissipation Wgz max	2.5 W	Grid No.2 dissipation Wgz max. 2.5 W
Cathode current I max	100 mA	Cathode current I max. 100 mA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to heater voltage V_g max	200 V	Cathode to heater voltage V_g max. 200 V

TUBE TINKER

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

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