



ELECTRONIC TUBE REFERENCE

PCC85

Voltage - Dual Triode (similar) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

RF dual triode designed for television tuner oscillator and mixer service to approximately 200 MHz, integrating local oscillation and frequency conversion.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	15000 Ω
TRANSCONDUCTANCE	0.0067 S
AMPLIFICATION FACTOR	48
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	15 mA
Published section ratings and characteristics promoted where applicable.	

SECTION2 Triode	
No fixed ratings recorded.	
Published section ratings and characteristics promoted where applicable.	

RF dual triode for television oscillator and mixer service up to about 200 MHz.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Tesla

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

195X TESLA

Section 1 · Triode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	9 V	Published nominal value
Heater current	300 mA	Published nominal value



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Triode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	9 V	—
Heater Current	300 mA	—



1963 Philips Electron Tubes Handbook V1

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	OscillatorMixer;EachSection
Control-grid voltage	-1.1 V	OscillatorMixer;EachSection
Plate current	4.5 mA	OscillatorMixer;EachSection
Plate voltage	170 V	OscillatorMixer;EachSection
Control-grid voltage	-1.5 V	OscillatorMixer;EachSection
Plate current	10 mA	OscillatorMixer;EachSection
Oscillator supply voltage	180 V	Oscillator
Oscillator output voltage	9 V RMS	Oscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	4600 μ S	100VPlate
Amplification factor	50	100VPlate
Transconductance	6200 μ S	170VPlate
Amplification factor	50	170VPlate

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.5 pF	EachSection



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	9 V	SeriesHeater
Heater current	300 mA	SeriesHeater

[SOURCE DATA APPENDIX](#)

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 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	TelevisionRF text	—

[SOURCE DATA APPENDIX](#)

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 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	9 V	Published nominal value
Heater current	300 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	2.5 W	Published maximum rating



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current I_a	10 mA	—
Transconductance S	6.7 mA/V	—
Heater current I_f	300 mA	—
Anode to anode other unit $C_{aa'}$ max	0.04 pF	—
Anode to anode other unit $C_{aa'}$ max	0.008 pF	—
Grid to grid other unit C_{gg^*} max	0.003 pF	—
Anode to grid other unit $C_{ag'}$ max	0.008 pF	—
Anode to grid other unit $C_{a'g}$ max	0.008 pF	—
Anode to cathode other unit $C_{ak'}$ max	0.008 pF	—
Anode to cathode other unit C_{ak} max	0.008 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to cathode other unit Cgk' max	0.003 pF	—
Grid to cathode other unit Cg'k max	0.003 pF	—
Grid voltage Vg -1.2) -1.75	-2.4 V	—
Anode current I, 4.5 10	10 mA	—
Transconductance S 4.8 6.7	6 mA/V	—
applications in which the input voltage Vi =2 5 mV for an output of	50 mW	—
50 mV for an output	5 W	—
with a bias of	-1.5 V	—
Grid input resistance (f [1]	100 MHz	—
Grid input resistance (f [2]	15 kΩ	—
Anode supply voltage Vi,	180 V	—
Grid resistor Rg	22 kΩ	—
Anode current Iy	7.4 mA	—
Anode dissipation Wa	1.2 W	—
Vo	200 mA/V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to grid Cag	1.5 pF	—
Anode to cathode Cak	0.18 pF	—
Anode to cathode + heater + screen Ca/kfs	1.2 pF	—
Grid to cathode + heater + screen Cg/Kkfs	3.1 pF	—
Anode to cathode + heater + screen Ca/kfs	1.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode supply voltage Vb 106 170	200 V	—
Anode resistor R, 4.7 4.7	8.2 kΩ	—
Anode current L 2.7 5.5	6 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion conductance S_c 2.2 2.8	2.9 mA/V	—
Anode voltage V_{a10} max	550 V	—
V_a max	250 V	—
Anode dissipation W , max	2.5 W	—
Anode dissipation, total $W_{as} W_{yr}$ max	4.5 W	—
Cathode current I max	15 mA	—
Cathode to heater voltage V_{it} max	90 V	—
Grid voltage , negative $-V$ max	100 V	—