



ELECTRONIC TUBE REFERENCE

PCF806

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode-pentode from Mullard technical data; available source material does not establish a narrower functional role confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B9A	BASE PINS	9
NOMINAL HEATER	8 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.0055 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	15 mA
Triode oscillator section.	

SECTION2 Pentode	
PLATE RESISTANCE	350000 Ω
TRANSCONDUCTANCE	0.012 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	18 mA
<i>Frame-grid pentode mixer section; plate resistance published as greater than 350 kOhm.</i>	

TriodePentode; electrical ratings and operating data extracted from the supplied Mullard datasheet.



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	8 V	—
Heater Current	300 mA	—
Maximum Intended Frequency	220 MHz	FrequencyChanger



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	8 V	—
HeaterOrFilamentCurrent	300 mA	—
Plate Voltage	100 V	—
Plate Current	14 mA	—
Transconductance	5.5 mA/V	—
Amplification Factor	17	—

1963 MULLARD

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	170 V	—
Screen Voltage	150 V	—
Plate Current	10 mA	—
Screen Current	3.3 mA	—
Transconductance	12 mA/V	—
PlateResistanceMinimum	350 kohm	—
MaximumOperatingFrequency	220 MHz	—



SOURCE DATA APPENDIX

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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	TriodeSection
Plate current	14 mA	TriodeSection
Grid voltage	-3 V	TriodeSection
Transconductance	5500 uS	TriodeSection
Amplification factor	17	TriodeSection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-cathode/heater capacitance	2.2 pF	TriodeSection
Plate-cathode/heater capacitance	1.2 pF	TriodeSection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-grid capacitance	2 pF	TriodeSection

1967 MULLARD RECEIVING AND AMPLIFYING VALVES

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	170 V	PentodeSection
Screen-grid voltage	150 V	PentodeSection
Plate current	10 mA	PentodeSection
Screen-grid current	3.3 mA	PentodeSection
Grid voltage	-1.2 V	PentodeSection
Transconductance	12000 uS	PentodeSection
Equivalent noise resistance	1 kOhm	PentodeSection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate input capacitance	6 pF	PentodeSection
Plate output capacitance	3.3 pF	PentodeSection
Plate-grid capacitance	0.012 pF	PentodeSection

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Supply voltage	190 V	FrequencyChanger
Screen-grid resistor	18 kOhm	FrequencyChanger
Plate current	8.5 mA	FrequencyChanger
Screen-grid current	2.7 mA	FrequencyChanger
Oscillator voltage RMS	2.3 V	FrequencyChanger
Conversion transconductance	4500 uS	FrequencyChanger



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
changer at frequencies up to	220 Mc/s	—
Input Pentode $c_{in(p)}$	60 pF	—
Output Pentode $c_{out(p)}$	3.3 pF	—
Grid 1 to Anode Pentode c_{gl_ap}	12 pF	—
Grid 1 to Grid 2 c_{grg2}	1.6 pF	—
Grid Triode to Anode Triode c_{gt-at}	20 pF	—
Anode Pentode to Anode Triode $c_{ap-at} <$	0.03 pF	—
Anode Pentode to Grid Triode $c_{ap-gt} <$	0.01 pF	—
Grid 1 to Anode Triode $c_{gt-at} <$	0.01 pF	—
Grid 1 to Grid Triode $c_{gl_gt} <$	0.01 pF	—
Anode Voltage V_a 170	100 V	—
Control Grid Voltage V_{gl} -1 2	-30 V	—
Anode Current I_a 10	14 mA	—
Mutual Conductance g_m 12	55 mA	—
Anode Voltage V_a	190 V	—
Heterodyne Voltage (R.M.S.) $V_{het(r.m.s.)}$	23 V	—
Anode Current I_a	85 mA	—
Screen Grid Current I_{82}	27 mA	—
Conversion Conductance g_c	45 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current I_h	3 A	—
Heater Voltage V_h	80 V	—
Maximum Anode Dissipation $p_a(\max, 20)$	15 W	—
Maximum Anode Voltage $V_a(\max, 250)$	125 V	—
Maximum Cathode Current $I_k(\max) 18$	15 mA	—
Grid Triode to Cathode and Heater $c_{gt-k,h}$	2.2 pF	—
Anode Triode to Cathode and Heater $c_{at-k,h}$	12 pF	—
Screen Supply Voltage ($R_{ga} = 18k\Omega$) $V_{8a(b)}$	190 V	—

TUBE TINKER

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

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