

ELECTRONIC TUBE REFERENCE

UABC80

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA
4 SECTIONS
CONSTRUCTION

DIODE-DIODE-DIODE-TRIODE

Series-heater triple-diode triode for AM/FM receiver detection and audio amplification. Three diode sections provide demodulation and control functions while the high-gain triode amplifies recovered audio.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	28.5 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode	
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	5 mA
Representative section for three diode systems sharing the common cathode.	

SECTION2 Diode	
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	5 mA
<i>Diode2 detector diode section.</i>	

SECTION3 Diode	
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	5 mA
<i>Diode3 detector diode section.</i>	

SECTION4 Triode	
PLATE RESISTANCE	60000 Ω
TRANSCONDUCTANCE	0.00165 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Published ratings and characteristics promoted from the approved source.</i>	

Triple-diode triode for FM/AM demodulation and audio-frequency amplification.

SOURCE OPERATING CONDITIONS

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	28.5 V	Published nominal value
Heater current	100 mA	Published nominal value
Transconductance	1500 μ S	Published operating characteristic

1953 RFT RUNDFUNK TECHNIK

Section 4 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	450 mA	Nominal
Maximum Plate Voltage	300 V	—
Maximum Plate Dissipation	1 W	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Diode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Signal detection	—

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 4 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	AF amplifier	—



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 4 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	1.5 mA	Plate 170 V; Grid -1.55 V



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 · Diode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	FM/AM demodulation diode	—

Section 2 · Diode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	FM/AM demodulation diode	—

Section 3 · Diode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	FM/AM demodulation diode	—

Section 4 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	AF amplifier	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1963 Philips Electron Tubes Handbook V1

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

Section 1 · Diode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode capacitance	0.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum inverse voltage	350 V	Diode1
Maximum average diode current	0.8 mA	Diode1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak diode current	5 mA	Diode1

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 2 · Diode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode capacitance	4.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum inverse voltage	350 V	Diode2
Maximum average diode current	0.8 mA	Diode2
Maximum peak diode current	5 mA	Diode2

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 3 · Diode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode capacitance	4.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum inverse voltage	350 V	Diode3
Maximum average diode current	0.8 mA	Diode3
Maximum peak diode current	5 mA	Diode3

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 4 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid capacitance	1.9 pF	—
Plate capacitance	1.4 pF	—
Grid-to-plate capacitance	2 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	170 V	TriodeSection
Grid voltage	-1.85 V	TriodeSection
Plate current	1 mA	TriodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1450 uS	TriodeSection
Amplification factor	70	TriodeSection
Plate resistance	48 kohm	TriodeSection


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 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triple diode triode with	100	Characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
V al b) max	550 V	LIMITING VALUES
P.I.V.la'd) max	350 V	LIMITING VALUES
P.I.V' la"d) max	350 V	LIMITING VALUES
P.I.V.(a"'d) max	350 V	LIMITING VALUES
i a 'd (P k) max,	6 a	LIMITING VALUES
ia"d(pk) max,	75 mA	LIMITING VALUES
ia' 'd(pk) max ,	75 mA	LIMITING VALUES

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
phony in circuits i n which the input voltage is not less t han	10	LIMITING VALUES
0 2 4 6 Va 'd (V)	6 V	LIMITING VALUES
0 5 10 15 Valid Va ,"l V)	15 V	LIMITING VALUES
IN PUT VO LTAGE BETWEEN 0V AND	5	LIMITING VALUES
INPUT VO LTAG E BETW EEN 0V AN D	5	LIMITING VALUES
0 IA.~ ?	0	LIMITING VALUES

1967 MULLARD RECEIVING AND AMPLIFYING VALVES

Section 4 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Va	200 V	CAPACITANCES
gm	1.4 mA	CAPACITANCES
Vg max. (I ~ = +	3 V	CAPACITANCES



TUBE TINKER
ELECTRON TUBE DATABASE

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 4 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical anode current	1 mA	Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-anode capacitance	2 pF	Triode