



ELECTRONIC TUBE REFERENCE

UCH21

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

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEXODE-TRIODE

100 mA series-heater triode-hexode frequency changer for transformerless superheterodyne receivers. The triode serves as RF oscillator while the hexode performs mixer action.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	20 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Hexode	
PLATE RESISTANCE	1000000 Ω
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	100 V
<i>Published ratings and characteristics promoted from the approved source.</i>	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0032 S
MAXIMUM PLATE VOLTAGE	250 V
<i>Published ratings and characteristics promoted from the approved source.</i>	

Variable-mu triode-heptode frequency changer for series-heater receiver service, combining oscillator and mixer sections.



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 · Hexode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heptode Plate Voltage	200 V	HeptodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion Conductance	750 μ S	HeptodeSection

1951 MULLARD VALVE AND SERVICE MANUAL

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode Application	RF oscillator	TriodeSection



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 · Hexode

Characteristic		
Parameter	Published Value	Condition / Note
Plate Current	3.5 mA	ConverterSection
Conversion Conductance	750 μ S	ConverterSection
Plate Resistance	1 Mohm	ConverterSection

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 2 · Triode

Characteristic		
Parameter	Published Value	Condition / Note
Triode Plate Current	12 mA	—
Triode Transconductance	3200 μ S	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X Tesla

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

195X TESLA

Section 1 · Hexode

Other		
Parameter	Published Value	Condition / Note
HeaterVoltageNominal	20 V	Nominal
HeaterCurrentNominal	100 mA	Nominal
Maximum Plate Voltage	250 V	—
Maximum Screen Voltage	100 V	—

195X TESLA

Section 2 · Triode

Other		
Parameter	Published Value	Condition / Note
HeaterVoltageNominal	20 V	Nominal
HeaterCurrentNominal	100 mA	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	250 V	—



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 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	20 V	SeriesHeater

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and their source documents.

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