



ELECTRONIC TUBE REFERENCE

UCH11

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

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEXODE-TRIODE

Series-heater triode-hexode frequency changer for superheterodyne receivers. The triode serves as local oscillator while the high-resistance hexode performs mixing with good circuit isolation.

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 Triode	
TRANSCONDUCTANCE	0.003 S
AMPLIFICATION FACTOR	18
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Triode oscillator section.</i>	

SECTION2 Hexode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.00068 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	15 mA
<i>Hexode mixer section.</i>	

The UCH11 combines an oscillator triode and a variable-gain hexode mixer for superheterodyne receiver conversion stages. The datasheet provides multiple screen-supply arrangements and wide regulation ranges for the mixer section.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Oscillator text	—

1953 RFT RUNDFUNK TECHNIK

Section 2 · Hexode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	MixerFrequencyConverter text	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 2 · Hexode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	2.5 mA	ConverterSection
Conversion Conductance	750 μ S	ConverterSection
Plate Resistance	1 Mohm	ConverterSection

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode input capacitance	4.7 pF	Section1
Triode output capacitance	2.7 pF	Section1
Triode grid-plate capacitance	<1.5 pF	Section1

1959 TELEFUNKEN

Section 2 · Hexode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	Section2;ScreenVoltage=80V
Screen voltage	80 V	Section2
Oscillator-grid bias	-8 V	Section2

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion transconductance	680 uS	Section2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Hexode input capacitance	6.2 pF	Section2
Hexode output capacitance	9.1 pF	Section2
Control-grid-to-plate capacitance	<0.002 pF	Section2