



ELECTRONIC TUBE REFERENCE

DCH21

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

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEXODE-TRIODE

Directly heated triode-hexode frequency converter for battery superheterodyne receivers. It combines an oscillator triode with a hexode mixer, providing useful conversion gain from low-voltage portable-radio supplies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	1.4 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Hexode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.00045 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	135 V
MAXIMUM SCREEN VOLTAGE	120 V
MAXIMUM PLATE DISSIPATION	0.2 W
MAXIMUM SCREEN DISSIPATION	0.2 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Hexode converter section; conversion transconductance used.</i>	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0014 S
AMPLIFICATION FACTOR	28
MAXIMUM PLATE VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	0.5 W
<i>Triode oscillator section.</i>	

Directly heated triode-hexode frequency converter for battery superheterodyne receivers. The supplied Philips sheet was read for heater/filament data, ratings, characteristics, capacitances, and operating conditions where published.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Hexode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	90 V	—
Screen voltage	60 V	—
Plate current	1 mA	—
Screen current	2 mA	—
Conversion transconductance	450 μ S	—
Plate resistance	0.4 Mohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	135 V	—
Maximum plate dissipation	0.2 W	—
Maximum screen dissipation	0.2 W	—
Maximum cathode current	10 mA	—

1999 PHILIPS 0-D

Section 2 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	60 V	—
Grid voltage	0 V	—
Transconductance	1.4 mA/V	—
Amplification factor	28	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	100 V	—
Maximum plate dissipation	0.5 W	—