



ELECTRONIC TUBE REFERENCE

ECH4

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

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEPTODE-TRIODE

Triode-hexode frequency changer for superheterodyne receiver service. Its integrated oscillator triode and multi-grid mixer provide the local oscillation and frequency-conversion functions required by the receiver front end.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 320 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode

No fixed ratings recorded.

Published ratings and characteristics extracted from supplied datasheet.

SECTION2 Heptode

No fixed ratings recorded.

Published ratings and characteristics extracted from supplied datasheet. Philips ECH4 is a triode-heptode (not triode-hexode) frequency changer with variable mutual conductance; the heptode can serve as frequency converter or HF/IF/LF amplifier. Other technical data are referenced to ECH21 by Philips; no unverified ECH21 maximum ratings are promoted.

Triode-heptode/hexode frequency-converter tube for oscillator, mixer, and amplifier service. The supplied manufacturer datasheet provides heater data, electrical characteristics, ratings, capacitances, operating conditions, and application information where published.

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 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ce	9.2 pF	Published datasheet value
Ce = 9,2 pF Ca	5.4 pF	Published datasheet value
Cagt <	0.002 pf	Published datasheet value
Cagt < 0,002 pf Cag = <	241 PF	Published datasheet value
cgl	2 pF	Published datasheet value
cgl = 2.0 pF Cg	0 pF	Published datasheet value
g3	8.9 pF	Published datasheet value
g3 = 8,9 pF Cut <	0.3 pF	Published datasheet value
cglgl «	0.2 pf	Published datasheet value
CglglH <	0.1 pF	Published datasheet value
Cgl+gl	14 pF	Published datasheet value
C(gT+g3)glH <	0.25 pF	Published datasheet value
c(gT+g3)eH <	0.1 pF	Published datasheet value

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