



ELECTRONIC TUBE REFERENCE

6CU7

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

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEXODE-TRIODE

Triode-hexode frequency converter with a remote-cutoff mixer section for gain-controlled superheterodyne front ends. The triode supplies local oscillation while the hexode performs controlled mixer action.

GENERAL CHARACTERISTICS

BASE DESIGNATION	OCTAL	BASE PINS	9
NOMINAL HEATER	6.3 V / 230 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Hexode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.00075 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	7 mA
Conversion transconductance promoted.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0028 S
AMPLIFICATION FACTOR	22
MAXIMUM PLATE VOLTAGE	175 V
MAXIMUM PLATE DISSIPATION	0.8 W
MAXIMUM CATHODE CURRENT	6 mA

Triode-hexode converter with remote-cutoff hexode section. The supplied Philips/JETEC/RTMA sheet was read for heater data, section ratings, characteristics, operating conditions, and capacitances, with repeated identical sections compressed only where the locked workflow allows.

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
Heater voltage	6.3 V	—
Heater current	230 mA	—
Conversion transconductance	750 μ S	—
Plate voltage	250 V	—
Screen voltage	85 V	—
Plate current	3 mA	—
Plate resistance	1000000 ohm	Minimum

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	4 pF	—

1999 PHILIPS 0-D

Section 2 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	—
Plate current	10 mA	—
Transconductance	2800 μ S	—
Amplification factor	22	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-grid capacitance	1.2 pF	—