

N.V. PHILIPS ' GLOEILAMPENFABRIEKEN EINDHOVEN HOLLAND

TUBE TYPE 6CU7

The 6CU7 is a triode hexode converter, the hexode section having remote cut-off characteristics.

PHYSICAL SPECIFICATIONS

Cathode	Coated unipotential
Base	E8-30
Bulb	Glass
Maximum overall length	2-3/8" (60mm)
Maximum seated height	2-1/16" (53mm)
Maximum diameter	7/8" (22mm)
Mounting position	Any

BASING CONNECTIONS (8GY)

Pin 1	Heater	Pin 5	Hexode Grids No.2 and No.4
Pin 2	Hexode plate	Pin 6	Hexode Grid No. 1
Pin 3	Triode plate	Pin 7	Cathode
Pin 4	Hexode Grid No. 3, Triode Grid	Pin 8	Heater

GENERAL ELECTRICAL DATA

Heater voltage	6.3	volts
Heater current	0.23	amps

ELECTRODE CAPACITANCES

Hexode Grid No. 1 to Triode Grid	<0.35	μF
Hexode Plate to Triode Grid	<0.2	μF

Hexode Section

Input	4.0	μF
Output	9.2	μF
Plate to Grid No. 1	<0.1	μF
Grid No. 1 to heater	<0.15	μF

Triode Section

Input	5.5	μF
Output	2.3	μF
Plate to Grid	1.2	μF

CHARACTERISTICSHexode Section

Plate voltage	250	volts
Grids No. 2 and No. 4 voltage	85	volts
Plate current	3.0	ma
Grids No. 2 & No. 4	3.0	ma
Grid No. 1 voltage	-2.0	volts
Conversion transconductance	750	μmhos
Plate resistance	>1.0	megohms
Grid No. 1 bias for conversion transconductance of 7.5 μmhos	-29	volts

Triode section

Plate voltage	100	volts
Plate current	10	ma
Grid voltage	0	volts
Transconductance	2,800	μ mhos
Amplification factor	22	

MAXIMUM RATINGS (Design Centre Values)Hexode Section

Plate supply voltage	550	volts
Plate voltage	250	volts
Plate dissipation	1.5	watts
Grids No. 2 and No. 4 supply voltage	550	volts
Grids No. 2 & No. 4 voltage		
(Plate current = 3ma)	125	volts
(Plate current < 1ma)	250	volts
Grids No. 2 & No. 4 dissipation	0.3	watts
Cathode current	7	ma
Grid No. 1 circuit resistance	3	megohms
Grid No. 3 circuit resistance	3	megohms
Voltage between heater and cathode	50	volts
External resistance between heater and cathode	20,000	ohms

Triode Section

Plate supply voltage	550	volts
Plate voltage	175	volts
Plate dissipation	0.8	watts
Cathode current	6	ma
Grid circuit resistance	3	megohms







