

N.V. PHILIPS ' GLOEILAMPENFABRIEKEN EINDHOVEN HOLLAND

TUBE TYPE 6CT7

The 6CT7 is a single diode, remote cut-off R.F. pentode.

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 8GX

Pin 1	Heater	Pin 5	Grid No. 2
Pin 2	Pentode Plate	Pin 6	Grid No. 1
Pin 3	Diode Plate	Pin 7	Cathode, Internal Shield
Pin 4	Grid No. 3	Pin 8	Heater

GENERAL ELECTRICAL DATA

Heater voltage	6.3	volts
Heater current	0.2	amps

ELECTRODE CAPACITANCES

Diode plate to Grid No. 1	<0.0015	μF
Diode plate to pentode plate	<0.15	μF

Pentode section

Plate to Grid No. 1	<0.002	μF
Grid No. 1 to heater	<0.05	μF
Input	4.5	μF
Output	5.1	μF

Diode section

Plate to cathode	3.8	μF
Plate to heater	<0.02	μF

CHARACTERISTICS

Plate voltage	250	volts
Grid No. 2 voltage	85	volts
Plate current	5.0	ma
Grid No. 2 current	1.5	ma
Grid No. 1 voltage	-2.0	volts
Transconductance	2,000	μmhos
Plate resistance	1.4	megohms
Grid No. 1 voltage for trans-conductance of 20 μmhos	-43	volts
Amplification factor of Grid No. 2 with respect to Grid No. 1	18	

MAXIMUM RATINGS (Design Centre Values)Pentode Section.

Plate supply voltage	550	volts
Plate voltage	300	volts
Plate dissipation	2	watts
Grid No. 2 supply voltage	550	volts
Grid No. 2 voltage (plate current $\leq 2.5\text{ma}$)	300	volts
Grid No. 2 voltage (plate current = 5.0ma)	150	volts
Grid No. 2 dissipation	0.3	watts
Cathode current	10	ma
Grid No. 1 circuit resistance	3	megohms
Grid No. 3 circuit resistance (for peak voltage on Grid No. 3 not exceeding 10 volts positive)	3	megohms
Voltage between heater and cathode	100	volts
External resistance between heater and cathode	20,000	ohms

Diode Section.

Peak Plate Voltage	200	volts
Plate current	0.8	ma



