E.H.T. RECTIFYING TUBE

High-vacuum single-anode rectifying tube for high tension in television receivers (E.H.T. supply from the line time base)

The DY802 has a chemically treated envelope which avoids flash-over under conditions of high humidity and low atmospheric pressure (45 cm Hg).

HEATING: Indirect by A.C. or D.C.; parallel supply

Heater voltage	V_f	1.4	V
Heater current	I_f	600	mA

Tolerances of V_f

a. As E.H.T. rectifier in television receivers

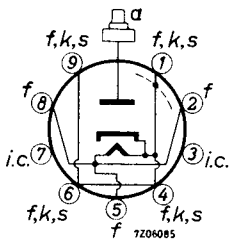
The heater voltage should be adjusted to its nominal value at a D.C. output current of 200 μA. At an increase of the D.C. output current to 400-800 μA which can incidentically occur during operation the decrease of the heater voltage may amount to max. 15%. These requirements hold for nominal mains voltage and full horizontal scanning of the picture tube. If the picture width control is such that also the heater voltage of the E.H.T. diode is influenced, the influence of this control must be kept within the 15% limit indicated above.

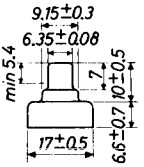
b. For all other applications the limits for the heater voltage are as given in the application directions.

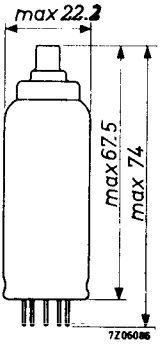
DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: Noval







REMARKS

a. Pins 1, 4, 6 and 9 can be used for fixing an anti-corona ring.
b. Circuit elements having the same potential as the heater (e.g. a series resistor) may be connected to pins 3 and 7. These pins must never be earthed.
c. If the tube operates a high values of V_{ainvp} and/or under conditions of high relative humidity or low pressure the metal top-cap should get an insulating cover to avoid corona phenomena.

CAPACITANCE

Anode to all	C_a	1.0	pF

OPERATING CHARACTERISTICS

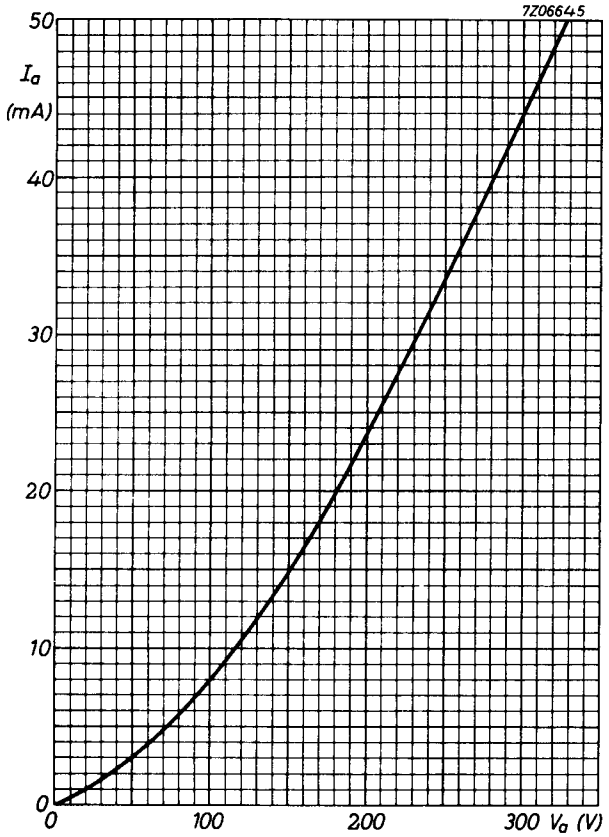
Output current	I_o	200	μA
Output voltage	V_o	20	kV

LIMITING VALUES (Design centre rating system unless otherwise stated)

Output voltage	V_o	max.	20	kV
Peak inverse voltage	V_{ainvp}	max.	25	kV [1]
Peak inverse voltage (Abs. max.)	V_{ainvp}	max.	30	kV [1]
Output current, average	I_o	max.	500	μA [2]
peak	I_{op}	max.	50	mA
Filter input capacitance	C_{filt}	max.	3000	pF

[1] Max. duration 22% of a line scanning cycle and maximum 18 μs.
The negative peak anode voltage due to ringing in the line-output transformer must be taken into account.

[2] During short periods as in TV operation I_o = max. 800 μA.


7Z06645
50
I_a
(mA)
40
30
20
10
0
0
100
200
300 V_a (V)

PHILIPS

Data handbook

Electronic components and materials

DY802

page	sheet	date
1	1	1970.01
2	2	1970.01
3	3	1970.01
4	FP	1999.07.29