

E.H.T. RECTIFYING TUBE

High-vacuum single-anode rectifying tube for hightension 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

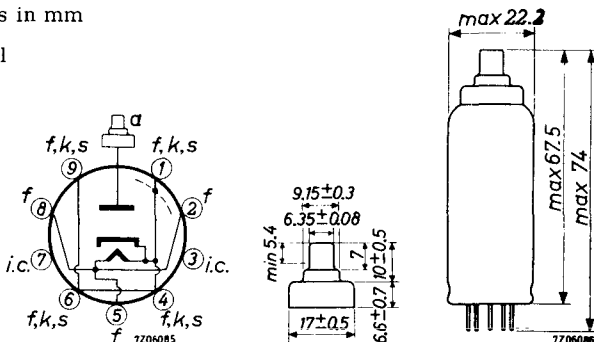
The heater voltage should be adjusted to its nominal value at a D.C. output current of $200\ \mu\text{A}$. At an increase of the D.C. output current to $400\text{--}800\ \mu\text{A}$ which can incidentally occur during operation the decrease of the heater voltage may amount to max. 15%. These requirements 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 at 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

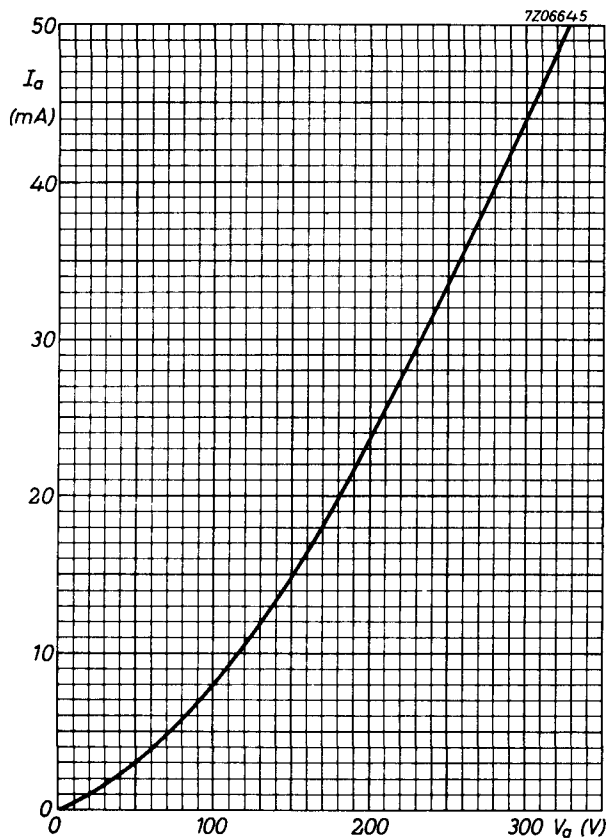
LIMITING VALUES (Design centre rating system unless otherwise stated)

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 $I_o = \text{max. } 800 \mu A$.



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