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

<table>
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<tr>
<th>Heater voltage</th>
<th>$V_f$</th>
<th>1.4 V</th>
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<tr>
<td>Heater current</td>
<td>$I_f$</td>
<td>600 mA</td>
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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 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 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

$$C_a = 1.0 \text{ pF}$$

OPERATING CHARACTERISTICS

Output current
$$I_o = 200 \text{ µA}$$

Output voltage
$$V_o = 20 \text{ kV}$$

LIMITING VALUES (Design centre rating system unless otherwise stated)

Output voltage
$$V_o \text{ max.} = 20 \text{ kV}$$

Peak inverse voltage
$$V_{ainvp} \text{ max.} = 25 \text{ kV} 1)$$

Peak inverse voltage (Abs. max.)
$$V_{ainvp} \text{ max.} = 30 \text{ kV} 1)$$

Output current, average
$$I_o \text{ max.} = 500 \text{ µA} 2)$$

peak
$$I_{op} \text{ max.} = 50 \text{ mA}$$

Filter input capacitance
$$C_{filt} \text{ max.} = 3000 \text{ pF}$$

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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 $I_o = \text{max.} 800 \text{ µA}$. 
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