

# SINGLE ANODE RECTIFYING TUBE

Single anode high vacuum rectifying tube.

| QUICK REFERENCE DATA |          |     |           |
|----------------------|----------|-----|-----------|
| Transformer voltage  | $V_{tr}$ | 250 | $V_{RMS}$ |
| D.C. current         | $I_o$    | 180 | mA        |

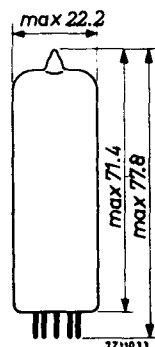
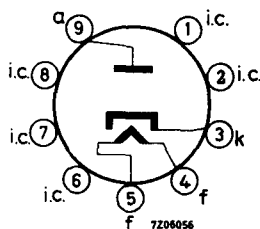
**HEATING:** Indirect by A.C. or D.C.; series supply

|                |       |     |    |
|----------------|-------|-----|----|
| Heater current | $I_f$ | 300 | mA |
| Heater voltage | $V_f$ | 19  | V  |

## DIMENSIONS AND CONNECTIONS

Base: Noval

Dimensions in mm

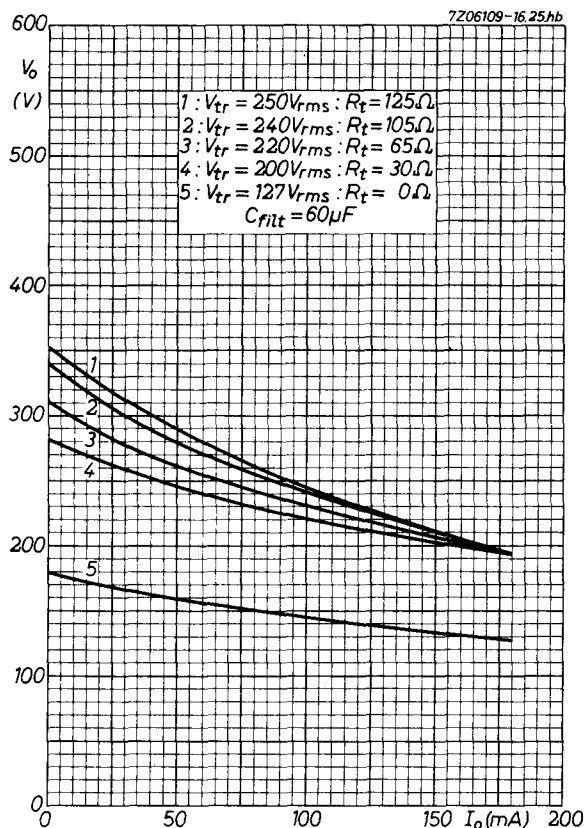


## OPERATING CHARACTERISTICS as single-phase half-wave rectifier

|                                       |            |     |     |     |     |     |           |
|---------------------------------------|------------|-----|-----|-----|-----|-----|-----------|
| Transformer voltage                   | $V_{tr}$   | 250 | 240 | 220 | 200 | 127 | $V_{RMS}$ |
| D.C. output voltage                   | $V_o$      | 195 | 195 | 195 | 195 | 127 | V         |
| D.C. current                          | $I_o$      | 180 | 180 | 180 | 180 | 180 | mA        |
| Protecting resistance                 | $R_t$      | 125 | 105 | 65  | 30  | 0   | $\Omega$  |
| Input capacitance of smoothing filter | $C_{filt}$ | 60  | 60  | 60  | 60  | 60  | $\mu F$   |

**LIMITING VALUES** (Design centre rating system)

|                                       |             |      |     |                       |     |     |          |
|---------------------------------------|-------------|------|-----|-----------------------|-----|-----|----------|
| Transformer voltage                   | $V_{tr}$    | max. | 250 | $V_{RMS}$             |     |     |          |
| Anode voltage, peak inverse           | $V_{ainvp}$ | max. | 700 | V                     |     |     |          |
| D.C. current                          | $I_o$       | max. | 180 | mA                    |     |     |          |
| Cathode to heater voltage, peak       | $V_{kf_p}$  | max. | 550 | V <sup>1)</sup>       |     |     |          |
| Input capacitance of smoothing filter | $C_{filt}$  | max. | 60  | $\mu F$ <sup>2)</sup> |     |     |          |
| Protecting resistance                 | $R_t$ min.  | 100  | 80  | 40                    | 30  | 0   | $\Omega$ |
| at transformer voltage                | $V_{tr}$    | 250  | 240 | 220                   | 200 | 127 | V        |



1) Max. 220  $V_{RMS}$  A.C. voltage + max. 250  $V_{D.C.}$  voltage.  
Cathode positive with respect to the heater.

2) When two tubes are placed in parallel,  $C_{filt} = \max. 100 \mu F$ .  
The resistor  $R_t$  must be inserted in the anode lead of each tube.

# PHILIPS

## Data handbook



**Electronic  
components  
and materials**

**PY82**

**page**

1

2

3

**sheet**

1

2

FP

**date**

1970.01

1970.01

1999.08.03