

AZ 4 Rectifying valve

The AZ 4 is a directly-heated full-wave rectifying valve for receivers consuming a heavy current.

FILAMENT RATINGS

Heating: direct, A.C.

Filament voltage. $V_f = 4.0 \text{ V}$

Filament current. $I_f = 2.3 \text{ A}$

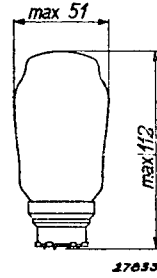


Fig. 1
Dimensions in mm.

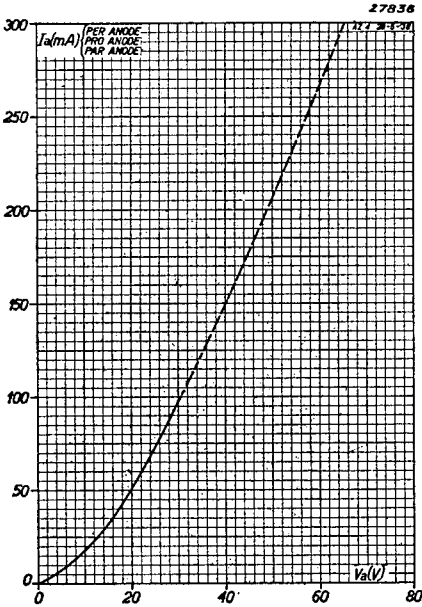


Fig. 3
Current per anode, as a function of the applied direct voltage.

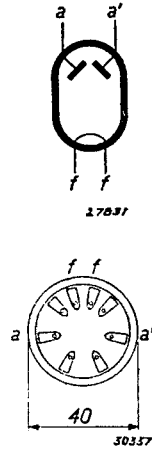


Fig. 2
Arrangement of base connections and electrodes.

MAXIMUM RATINGS

Voltage, on no load, across the secondary winding

of the power transformer $V_{tr} = \text{max. } 2 \times 500 \text{ V}_{\text{eff}}$

D.C. output with $V_{tr} = 2 \times 500 \text{ V}_{\text{eff}}$ $I_o = \text{max. } 120 \text{ mA}$

D.C. output with $V_{tr} = 2 \times 400 \text{ V}_{\text{eff}}$ $I_o = \text{max. } 150 \text{ mA}$

D.C. output with $V_{tr} = 2 \times 300 \text{ V}_{\text{eff}}$ $I_o = \text{max. } 200 \text{ mA}$

Capacitance of the first smoothing capacitor. $C = \text{max. } 60 \mu\text{F}$

For medium-power amplifier equipment two AZ 4 valves each working as a half-wave rectifying valve (anodes connected in parallel) may be used in a full-wave rectifier circuit.

If the valve is to be mounted horizontally it should be located so that the filament lies in the vertical plane.

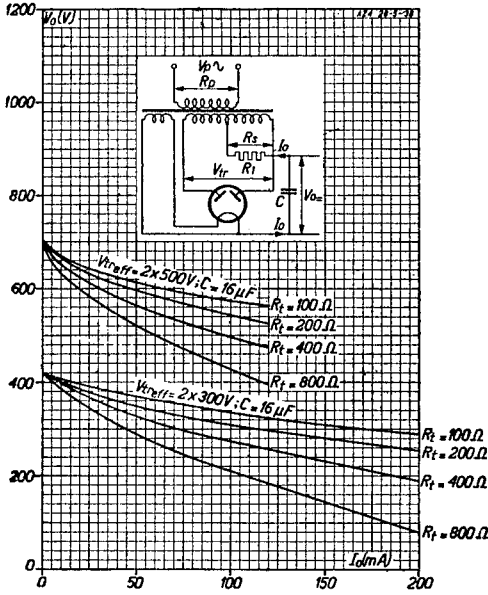


Fig. 4
Loading characteristics for transformer voltages, on no load, of $V_{tr} = 2 \times 300 \text{ V}$ and $2 \times 500 \text{ V}$ and with respect to different values of the internal resistance of the transformer ($R_t = R_s + n^2 R_p + R_l$).

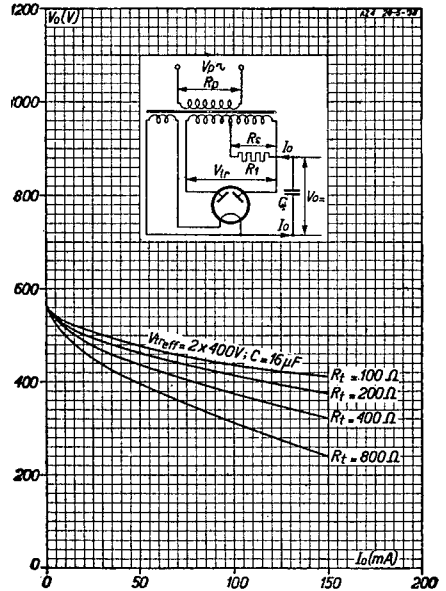


Fig. 5
Loading characteristics relating to $V_{tr} = 2 \times 400 \text{ V}$, for different values of the internal resistance of the transformer ($R_t = R_s + n^2 R_p + R_l$).