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: \( V_f = 4.0 \) V
- Filament current: \( I_f = 2.3 \) A

![Fig. 1](Dimensions in mm)

![Fig. 2](Arrangement of base connections and electrodes)

![Fig. 3](Current per anode, as a function of the applied direct voltage)

**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 \( V_{tr} = 2 \times 500 \ \text{V}_{\text{eff}} \): \( I_a = \text{max.} \ 120 \ \text{mA} \)
- D.C. output with \( V_{tr} = 2 \times 400 \ \text{V}_{\text{eff}} \): \( I_a = \text{max.} \ 150 \ \text{mA} \)
- D.C. output with \( V_{tr} = 2 \times 300 \ \text{V}_{\text{eff}} \): \( I_a = \text{max.} \ 200 \ \text{mA} \)

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 $\text{Vtr} = 2 \times 300 \text{ V}$ and $2 \times 500 \text{ V}$ and with respect to different values of the internal resistance of the transformer
($R_t = R_s + n^2 R_p + R_i$).

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