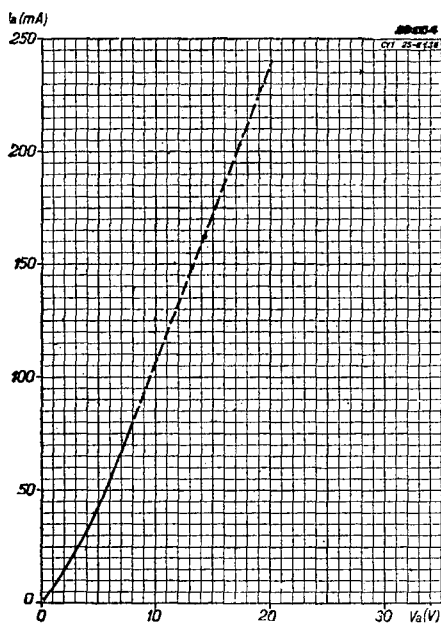
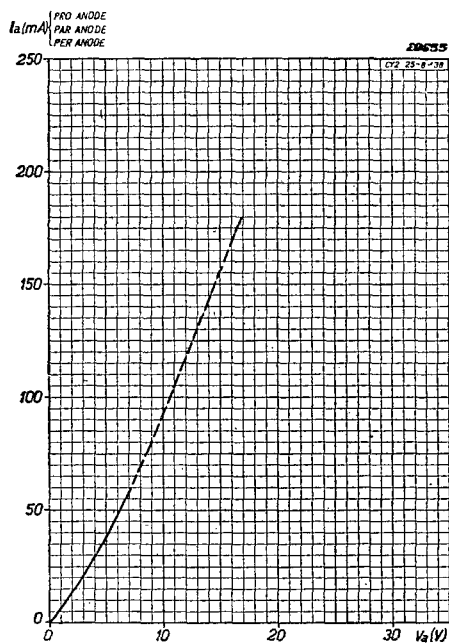


CY 1/CY 2



CY 1

Fig. 4
Anode current as a function of the applied voltage.



CY 2

Fig. 5
Anode current as a function of the applied direct voltage, per anode.

CY 2 Rectifying valve and voltage doubler

The CY 2 has a split cathode and two anodes and can be used either as a half-wave rectifying valve (see fig. 3) or as a voltage doubler. In the former case the valve will deliver 120 mA, whilst as voltage doubler it gives a maximum of 60 mA at roughly twice the voltage when used as rectifying valve.

It should be noted that the peak voltage between cathode and filament must in no case exceed 450 V and, on high-voltage mains, with large smoothing capacitors, a protecting resistor should be included in the anode circuit; minimum values for this resistor are given in the table below.

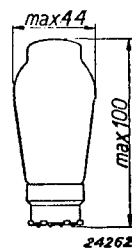


Fig. 1
Dimensions in mm.

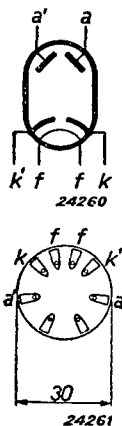


Fig. 2
Arrangement of
electrodes and
base connections.

Mains voltage	Smoothing capacitor	Series resistor
Max. 250 V	32 μ F	Min. 125 ohms
	16 μ F	Min. 75 ohms
	8 μ F	0 ohms
Max. 170 V	64 μ F	Min. 75 ohms
	16 μ F	Min. 30 ohms
	8 μ F	0 ohms
Max. 127 V	32 μ F	0 ohms
	16 μ F	0 ohms
	8 μ F	0 ohms

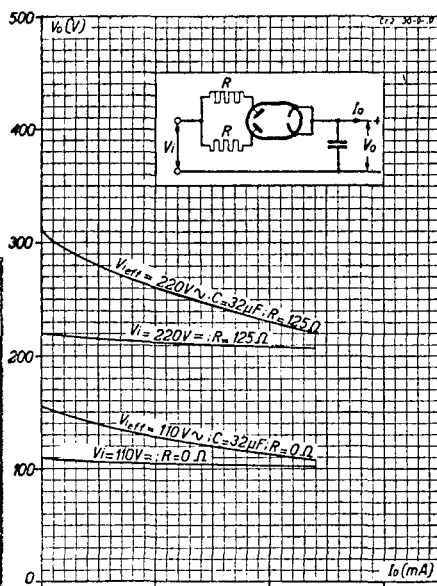


Fig. 3
Loading characteristics of the CY 2 employed as
half-wave rectifying valve.

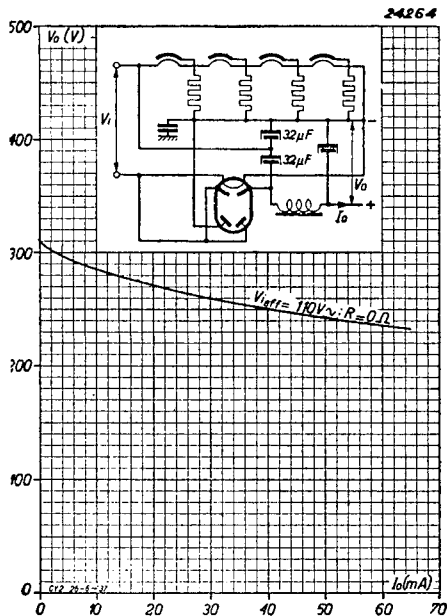


Fig. 4
Loading characteristic of the CY 2 used as a voltage doubler. This curve also applies to both voltage-doubling circuits

HEATER RATINGS

Heating: indirect by A.C. or D.C., series supply.

Heater voltage $V_f = 30\text{ V}$
Heater current $I_f = 0.200\text{ A}$

MAXIMUM RATINGS

- 1) As half-wave rectifying valve.
 - Alternating anode voltage $V_i = \text{max. } 250\text{ V}_{(\text{eff})}$
 - Direct current $I_o = \text{max. } 120\text{ mA}$
- 2) As voltage doubler
 - Alternating anode voltage $V_i = \text{max. } 127\text{ V}_{(\text{eff})}$
 - Direct current $I_o = \text{max. } 60\text{ mA}$
 - Voltage between heater and cathode (peak value) $V_{fk} = \text{max. } 450\text{ V}$