

E.H.T. RECTIFIER EY 51

DESCRIPTION

The EY 51 is a miniature all-glass half-wave rectifier of the wire-in type. Its low heater wattage renders it particularly suitable for use in E.H.T. supply units deriving their input from the line flyback, the heater current being obtained from a subsidiary winding on the line output transformer.

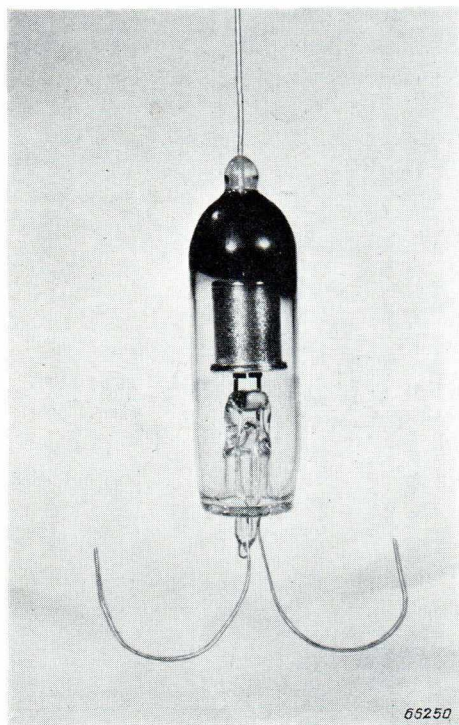


Fig. 120. The E.H.T. rectifier EY 51 (actual size).

APPLICATION

See Application Notes PL 81.

TECHNICAL DATA

HEATER DATA

Heating: indirect by A.C. or D.C.;
parallel supply

Heater voltage	V_f	6.3 V
Heater current	I_f	90 mA

CONNECTIONS AND DIMENSIONS (in mm)

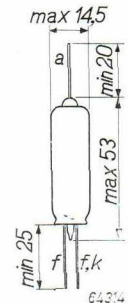


Fig. 121.

Mounting position any

Capacitance

between anode and cathode C_{ak} 0.8 pF

LIMITING VALUES

a. With sinusoidal input (mains frequency):

Input voltage	V_{tr}	max.	5 kV _{rms}
Average output current	I_o	max.	3 mA
Reservoir capacitance	C_{filt}	max.	0.1 μ F
Limiting resistance	R_t	min.	0.1 M Ω

b. With sinusoidal input (10—500 kc/s):

Peak inverse voltage	$V_{a invp}$	max.	17 kV
Average output current	I_o	max.	0.5 mA
Reservoir capacitance	C_{filt}	max.	0.01 μ F
Limiting resistance	R_t	min.	0.1 M Ω

c. With pulse input

Peak inverse voltage	$V_{a invp}$	max.	17 kV
Average output current	I_o	max.	0.2 mA
Peak cathode current	I_{kp}	max.	80 mA ¹⁾
Reservoir capacitance	C_{filt}	max.	5000 pF

¹⁾ For maximum pulse duration $\frac{1}{2}\%$ of the time between two pulses, with a maximum of 5 μ sec.

Fig. 122.
Anode current plotted
against anode voltage.

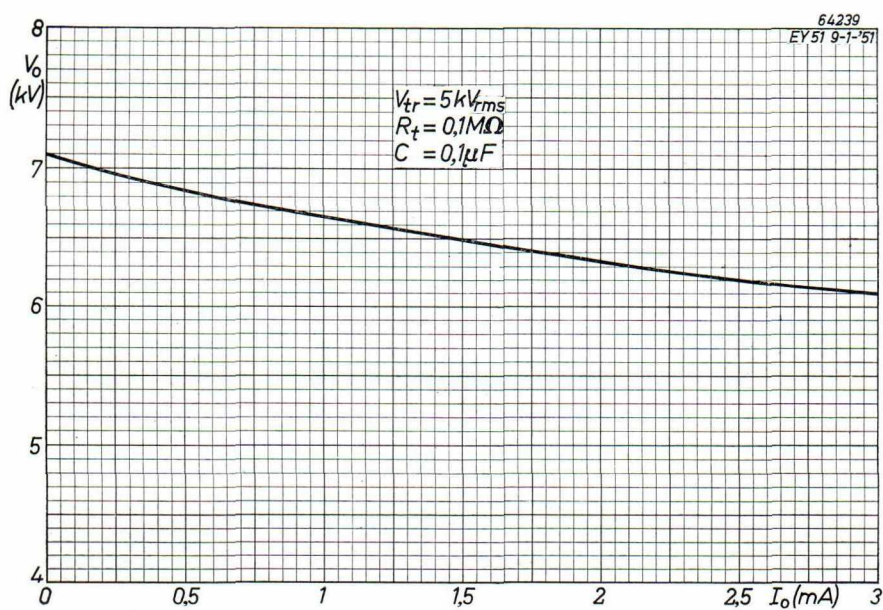
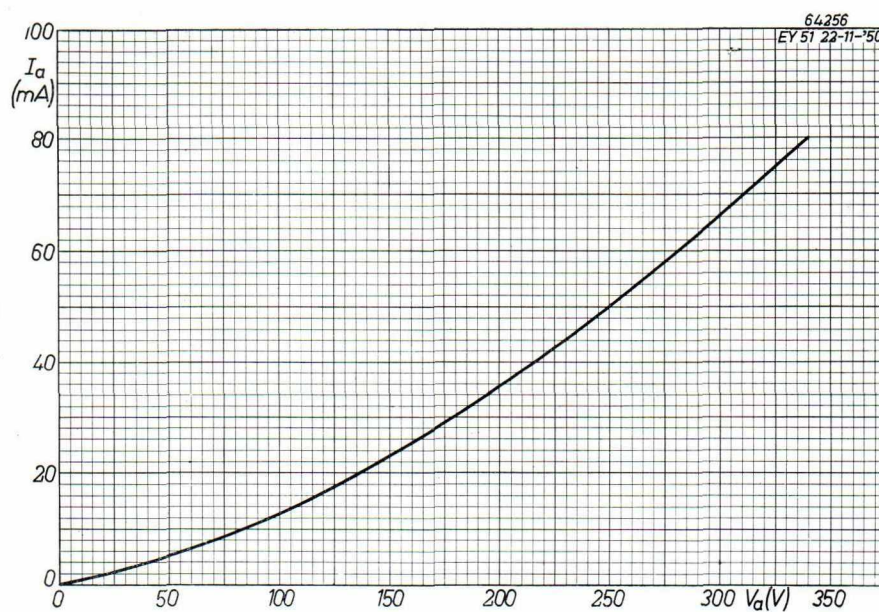


Fig. 123.
Regulation curve for si-
nusoidal input at 50 c/s.