

4683 Triode

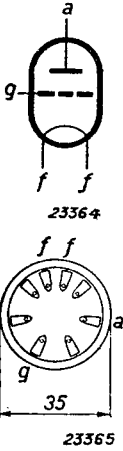


Fig. 2
Arrangement of electrodes and base connections.

The 4683 is a directly-heated power triode having an anode dissipation of 15 W.

FILAMENT RATINGS

Heating: direct, A.C., parallel supply.
 Filament voltage $V_f = 4 \text{ V}$
 Filament current $I_f = 0.95 \text{ A}$

CAPACITANCES

Anode-grid $C_{ag} < 20 \mu\mu\text{F}$

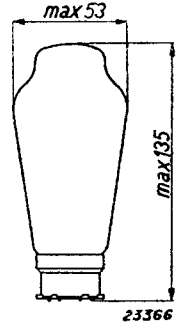


Fig. 1
Dimensions in mm.

OPERATING DATA

		Class AB output with auto. grid bias. (2 valves)	Class B output with fixed grid bias. (2 valves)
Anode voltage	$V_a =$	350 V	350 V
Common cathode resistor for automatic bias	$R_k =$	850 ohms	—
Fixed grid bias	$V_g =$	—	—75 V
Anode current (without signal) . .	$I_{a0} =$	$2 \times 43 \text{ mA}$	$2 \times 35 \text{ mA}$
Anode current at max. modulation	$I_{a \text{ max}} =$	$2 \times 46 \text{ mA}$	$2 \times 70 \text{ mA}$
Load resistor (between anodes) . .	$R_{aa} =$	8,000 ohms	5,000 ohms
Output power	$W_o =$	15.6 W	20 W
Alternating grid voltage (per grid) at max. modulation	$V_i =$	51 V_{eff}	49 V_{eff}
Distortion at max. modulation . .	$d_{tot} =$	2.3 %	2.1 %

MAXIMUM RATINGS per valve

V_{a0} = max. 600 V
 V_a = max. 350 V
 W_a = max. 15 W
 $V_g (I_g = + 0.3 \mu\text{A})$ = max. —2 V

I_k = max. 90 mA
 $R_{gk} (\text{auto. bias})$ = max. 0.7 M ohm
 $R_{gk} (\text{fixed bias})$ = max. 0.3 M ohm

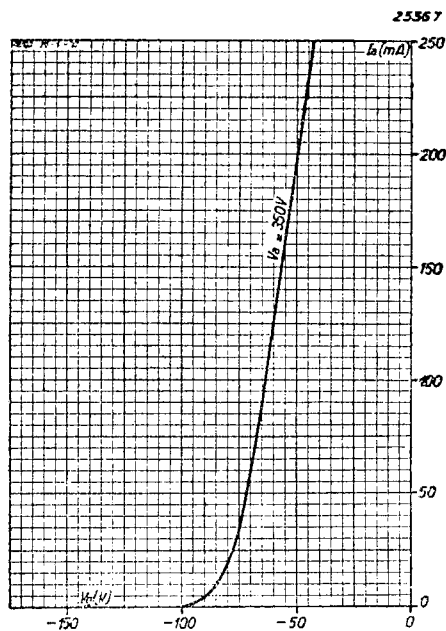


Fig. 3
Anode current as a function of the grid bias,
with $V_a = 350$ V.

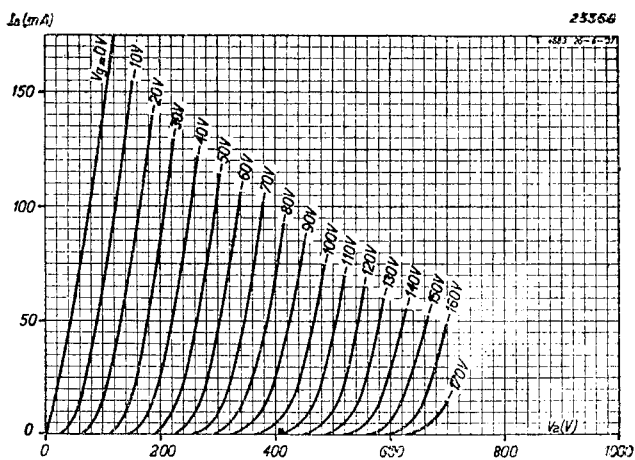


Fig. 4
Anode current as a function of the anode voltage for different values
of grid bias.

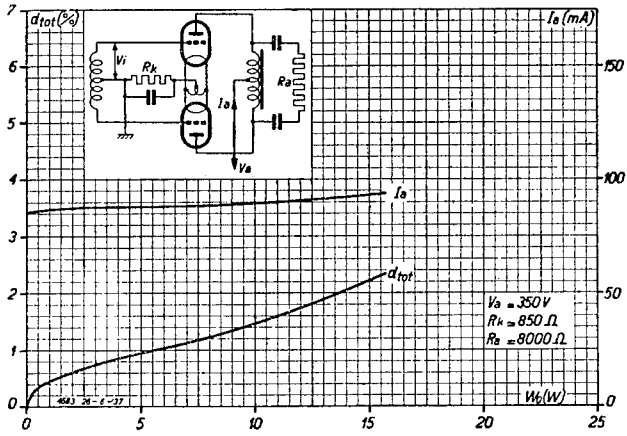


Fig. 5
Total distortion and total anode current as functions of the output power; 2 valves 4683 in a balanced circuit with automatic grid bias.

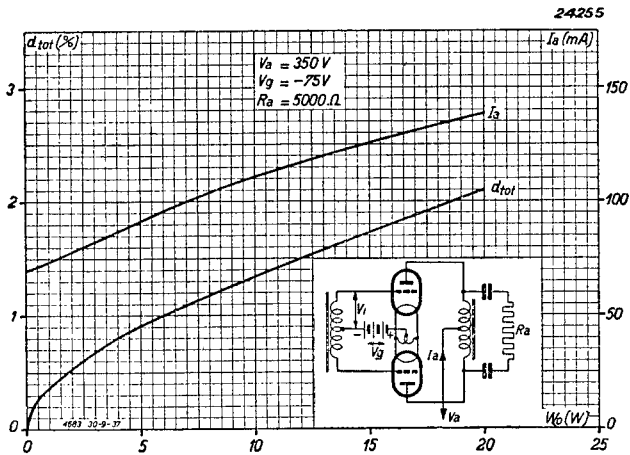


Fig. 6
Total distortion and total anode current as functions of the output power; 2 valves 4683 in a balanced circuit with fixed bias.