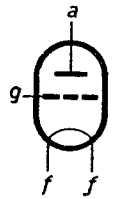
4683 Triode



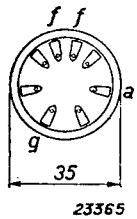


Fig. 2
Arrangement of electrodes and base connections.

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 . . . . . $V_f = 4$ V
Filament current . . . . . $I_f = 0.95$ A

CAPACITANCES

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

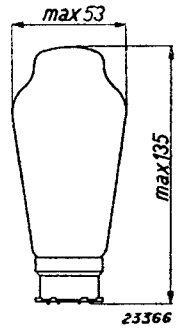


Fig. 1
Dimensions in mm.

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_{ao} =	2 × 43 mA	2 × 35 mA
Anode current at max. modulation	$I_{a\,max}$ =	2 × 46 mA	2 × 70 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_{ao} = max. 600 V
V_a = max. 350 V
W_a = max. 15 W
V_g ($I_g = +0.3$ μA) = max. —2 V
I_k = max. 90 mA
R_{gk} (*auto. bias*) = max. 0.7 M ohm
R_{gk} (*fixed bias*) = max. 0.3 M ohm

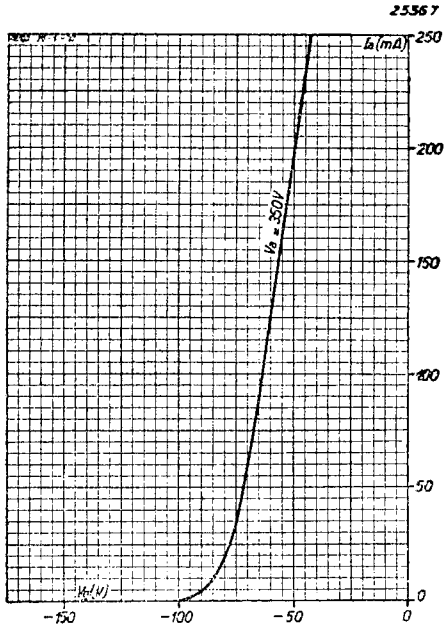


Fig. 3
Anode current as a function of the grid bias, with $Va = 350$ V.

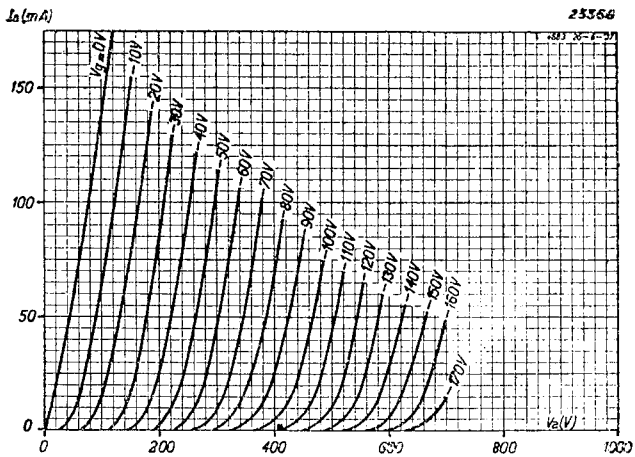


Fig. 4
Anode current as a function of the anode voltage for different values of grid bias.

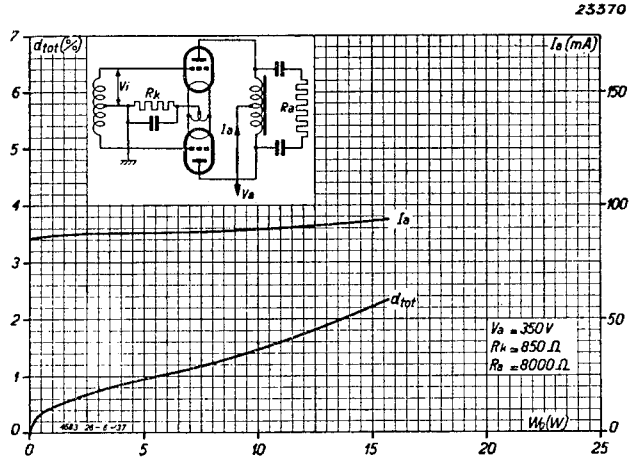


Fig. 5
Total distortion and total anode current as functions of the output power; 2 valves 4683 in a balanced circuit with automatic grid bias.

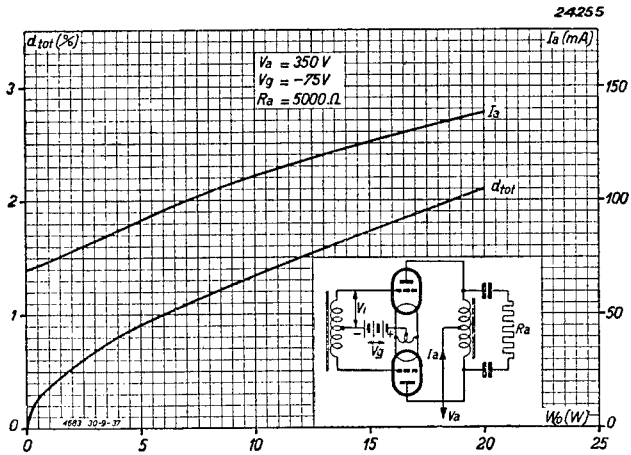


Fig. 6
Total distortion and total anode current as functions of the output power; 2 valves 4683 in a balanced circuit with fixed bias.