

A.F. OUTPUT PENTODE

Pentode intended for use as A.F. power amplifier.

QUICK REFERENCE DATA

Anode current	I_a	24	mA
Transconductance	S	5.4	mA/V
Amplification factor	μ_{g2g1}	17	
Output power	W_o	3	W

HEATING: Indirect by A.C. or D.C.; series supply

Heater current

I_f 300 mA

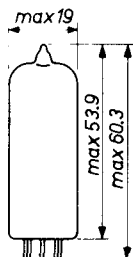
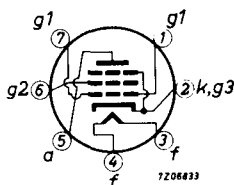
Heater voltage

V_f 4.5 V

DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: miniature 7-pin



CAPACITANCES

Anode to all except grid No. 1

$C_a(g_1)$ 3.5 pF

Grid No. 1 to all except anode

$C_{g1(a)}$ 5.3 pF

Anode to grid No. 1

C_{ag1} max. 0.4 pF

Grid No. 1 to heater

C_{g1f} max. 0.2 pF

TYPICAL CHARACTERISTICS

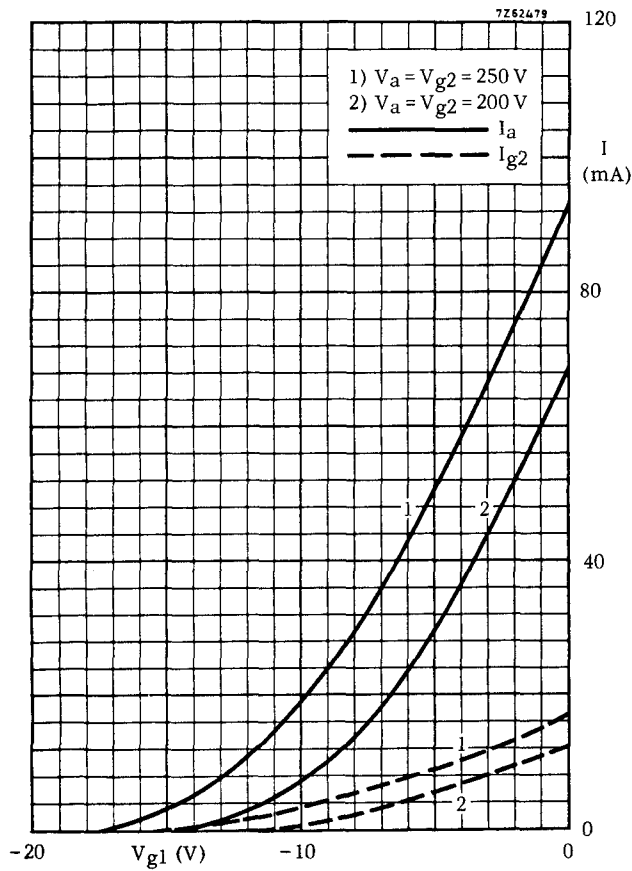
Anode voltage	V_a	250 V
Grid No.2 voltage	V_{g2}	250 V
Grid No.1 voltage	V_{g1}	-9.0 V
Anode current	I_a	24 mA
Grid No.2 current	I_{g2}	4.5 mA
Transconductance	S	5.4 mA/V
Amplification factor	μ_{g2g1}	17
Internal resistance	R_i	70 k Ω

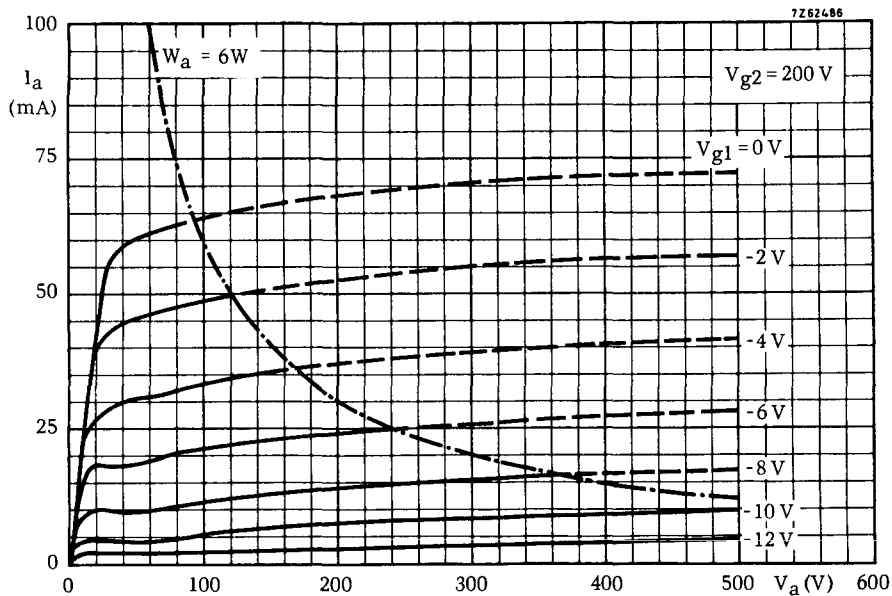
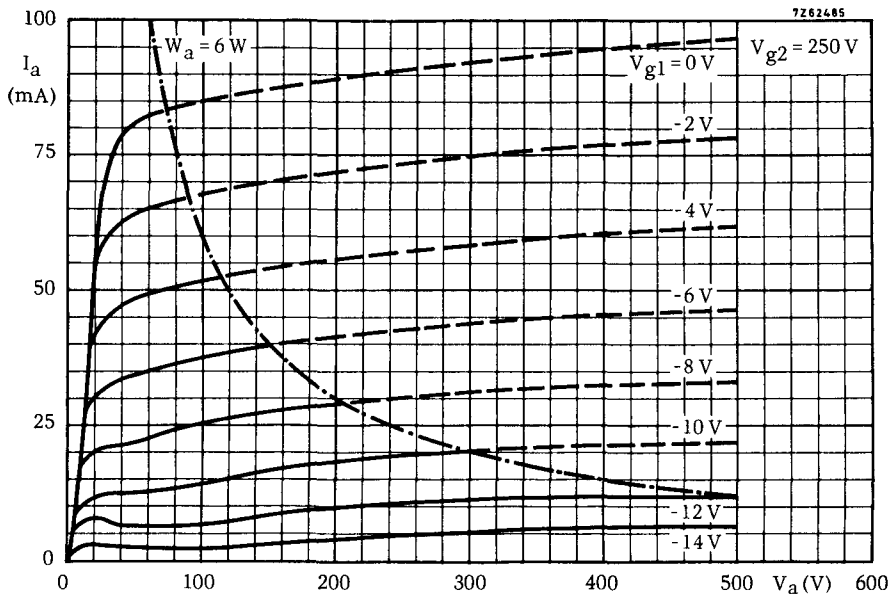
OPERATING CHARACTERISTICS
Class A

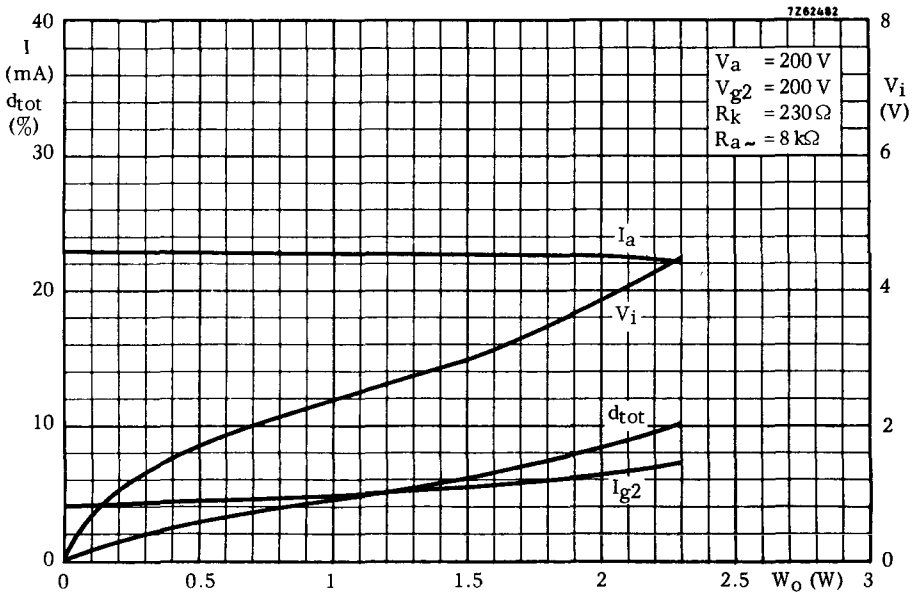
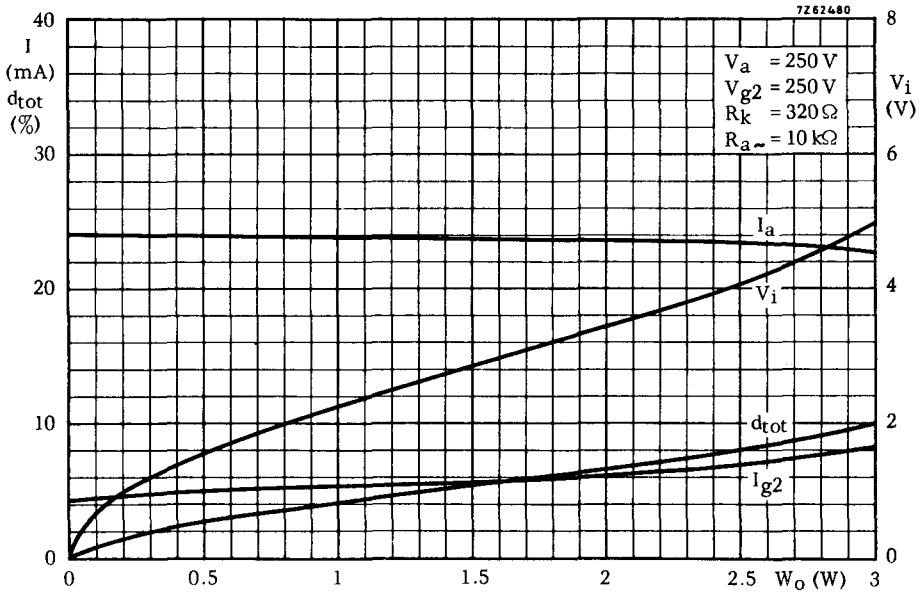
Anode voltage	V_a	200	250 V
Grid No.2 voltage	V_{g2}	200	250 V
Cathode resistor	R_k	230	320 Ω
Anode current ($V_i = 0$)	I_a	23	24 mA
Grid No.2 current ($V_i = 0$)	I_{g2}	4.2	4.5 mA
Load resistance	R_a	8	10 k Ω
Grid No.1 driving voltage	V_i	4.5	5 V _{RMS}
Output power	W_o	2.3	3.0 W
Distortion	d_{tot}	10	10 %
Grid No.1 driving voltage for $W_o = 50$ mW	V_i	0.50	0.50 V _{RMS}

LIMITING VALUES (Design centre rating system)

Anode voltage	V_{a0}	max.	550 V
	V_a	max.	300 V
Grid No.2 voltage	V_{g20}	max.	550 V
	V_{g2}	max.	300 V
Anode dissipation	W_a	max.	6 W
Grid No.2 dissipation			
average at $V_i = 0$	W_{g2}	max.	1.25 W
peak	W_{g2p}	max.	2.5 W
Cathode current	I_k	max.	35 mA
Grid No.1 resistor, automatic bias	R_{g1}	max.	2.2 M Ω
Cathode to heater voltage	V_{kf}	max.	200 V







PHILIPS

Data handbook



**Electronic
components
and materials**

PL95

page	sheet	date
1	1	1972.01
2	2	1972.01
3	3	1972.01
4	4	1972.01
5	5	1972.01
6	6	1972.01
7	FP	1999.03.19