

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

$$\frac{I_f}{V_f} \frac{300 \text{ mA}}{4.5 \text{ V}}$$

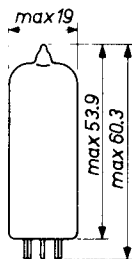
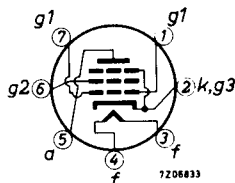
Heater voltage

$$\frac{I_f}{V_f} \frac{300 \text{ mA}}{4.5 \text{ V}}$$

DIMENSIONS AND CONNECTIONS

Dimensions in mm

Base: miniature 7-pin



CAPACITANCES

Anode to all except grid No. 1

$$C_{a(g1)} \quad 3.5 \text{ pF}$$

Grid No. 1 to all except anode

$$C_{g1(a)} \quad 5.3 \text{ pF}$$

Anode to grid No. 1

$$C_{ag1} \quad \text{max. } 0.4 \text{ pF}$$

Grid No. 1 to heater

$$C_{g1f} \quad \text{max. } 0.2 \text{ pF}$$

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

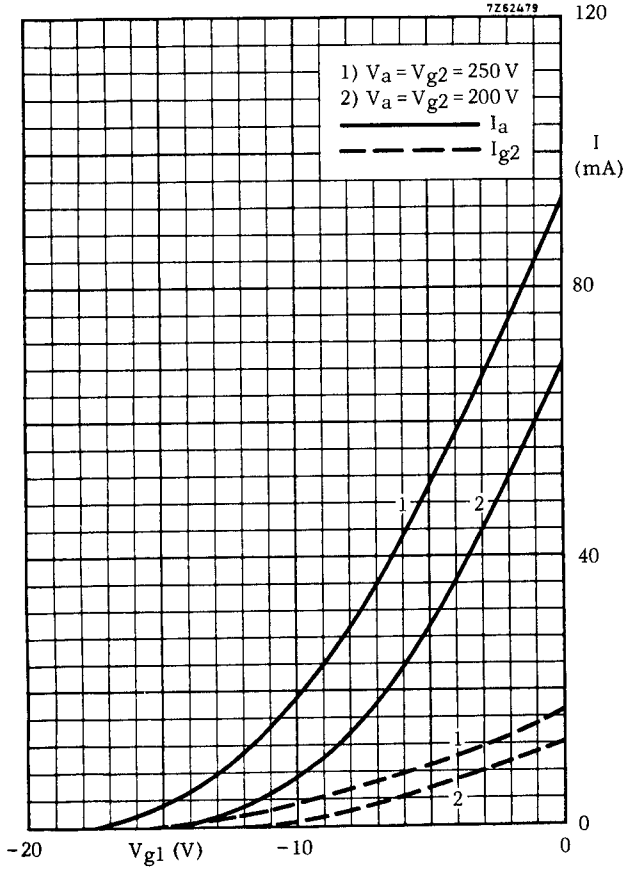
OPERATING CHARACTERISTICS

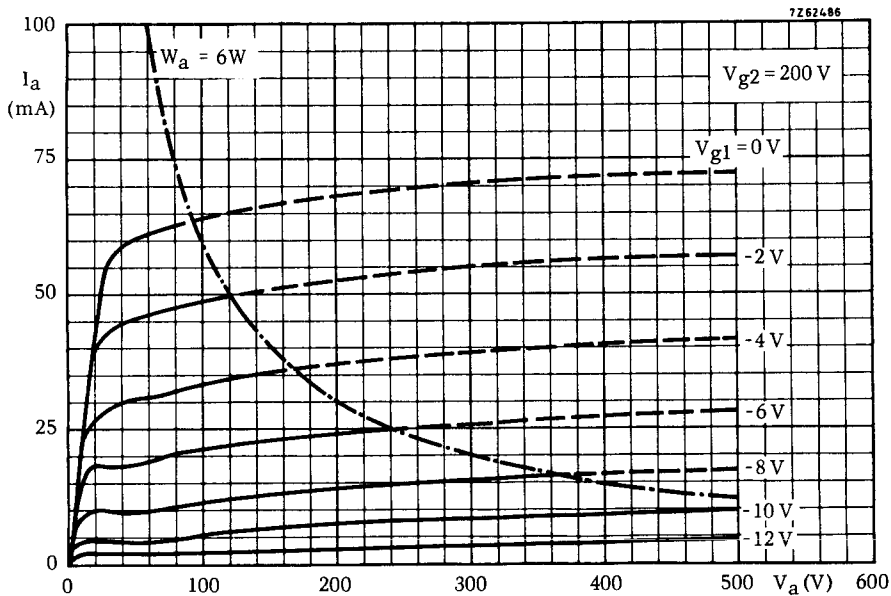
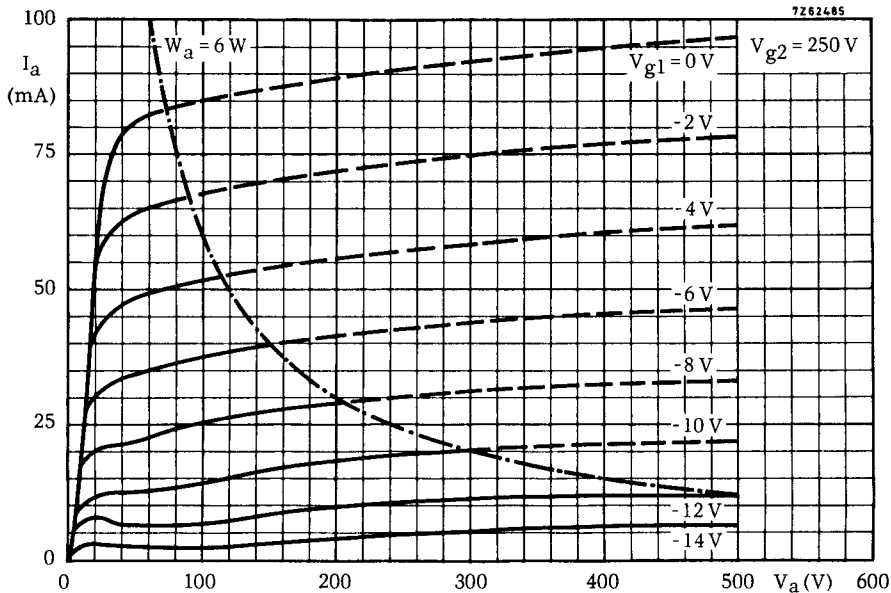
Class A

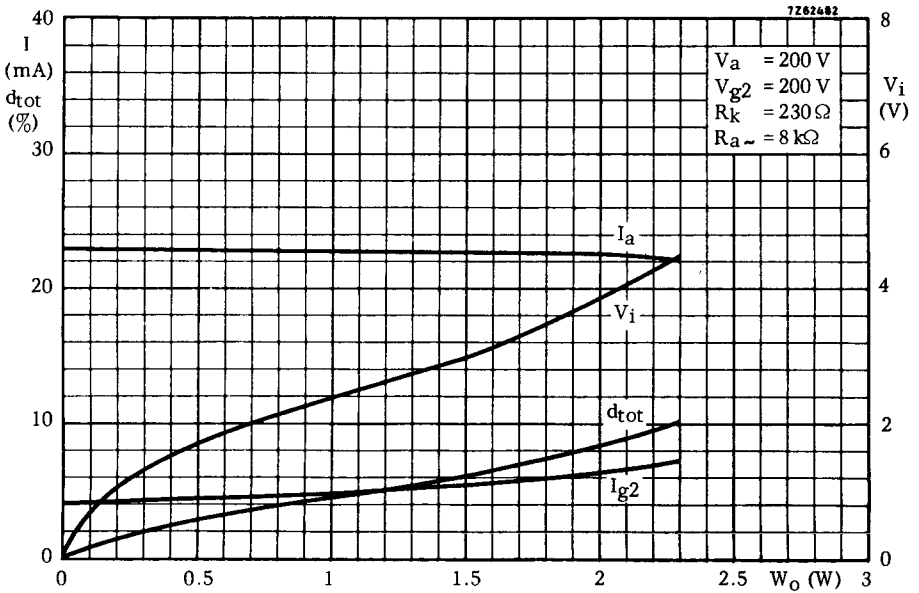
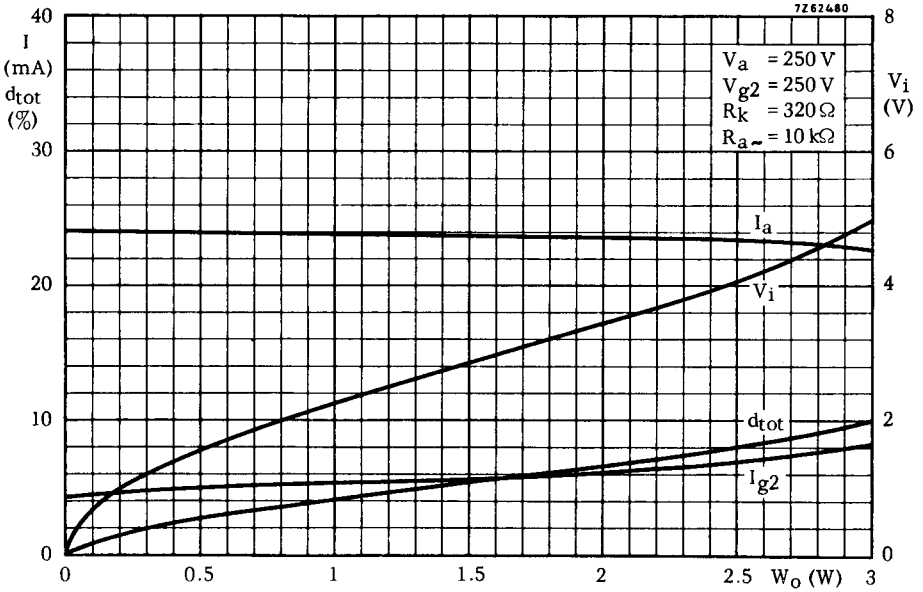
Anode voltage	V_a	200	250	V
Grid No.2 voltage	V_{g2}	200	250	V
Cathode resistor	R_k	230	320	Ω
Anode current ($V_i = 0$)	I_a	23	24	mA
Grid No.2 current ($V_i = 0$)	I_{g2}	4.2	4.5	mA
Load resistance	R_a	8	10	k Ω
Grid No.1 driving voltage	V_i	4.5	5	V _{RMS}
Output power	W_o	2.3	3.0	W
Distortion	d_{tot}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