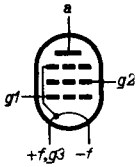
"Miniwatt" DL 65

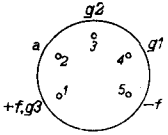
OUTPUT PENTODE for hearing aids
PENTHODE DE SORTIE pour appareils de sourds
ENDPENTHODE für Schwerhörigengeräte

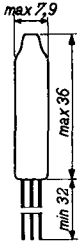
Heating: direct by D.C.; parallel supply
Chauffage: direct par C.C.; alimentation en parallèle
Heizung: direkt durch Gleichstrom; Parallelspeisung

Vf = 1,25 V
If = 13 mA

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Capacitances
Capacités
Kapazitäten

Cg1 = 2,5 pF
Ca = 2,2 pF
Cag1 < 0,2 pF

Typical characteristics
Caractéristiques typiques
Kenndaten

Va	=	22,5 V
Vg2	=	22,5 V
Vg1	=	-0,2 V
Ia	=	0,475 mA
Ig2	=	0,10 mA
S	=	0,42 mA/V
μg2g1	=	9
Ri	=	0,4 MΩ

Provisional data.Vorläufige Daten
Caractéristiques provisoires.

PHILIPS

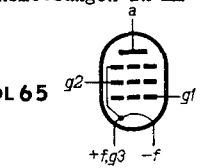
DL 65
DL 67

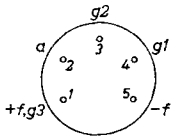
OUTPUT PENTODE for hearing aids
PENTHODE DE SORTIE pour appareils de sourds
ENDPENTODE für Schwerhörigengeräte

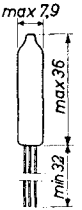
Heating : direct by D.C.
parallel supply
Chauffage: direct par C.C. V_f = 1,25 V
alimentation en parallèle I_f = 13 mA
Heizung : direkt durch Gleichstrom
Parallelspeisung

Dimensions in mm
Dimensions en mm
Abmessungen in mm

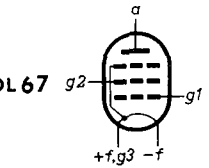
DL 65

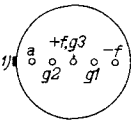


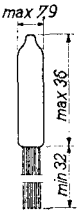




DL 67







Base, culot, Sockel: Subminiature

Capacitances
Capacités
Kapazitäten

C_{g1} = 2,5 pF
C_a = 2,2 pF
C_{ag1} < 0,2 pF

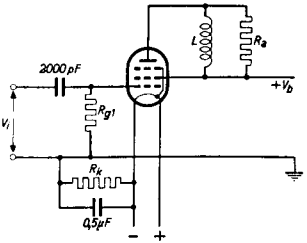
Typical characteristics
Caracteristiques types
Kenndaten

V_a	=	22,5 V
V_{g2}	=	22,5 V
V_{g1}	=	-0,2 V
I_a	=	0,475 mA
I_{g2}	=	0,10 mA
S	=	0,42 mA/V
R_i	=	0,4 MΩ
μ_{g2g1}	=	9

1) Red spot.Point rouge. Roter Punkt.

Operating characteristics
Caractéristiques d'utilisation
Betriebsdaten

Vb	=	22,5		22,5		V
Ra	=	0,1		0,1		MΩ
Rg1	=	10[1]		3		MΩ
Rk	=	0		4		kΩ
Vi	=	0	0,45	0	0,67	V_{eff}
Ia	=	0,5	0,34	0,20	0,19	mA
Ig2	=	0,095	0,09	0,04	0,07	mA
Wo	=	0	1,8	0	1,6	mW
d_{tot}	=	-	10	-	10	%



Limiting values
Caractéristiques limites
Grenzdaten

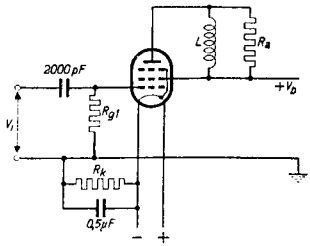
Va	= max.	45	V
Wa	= max.	25	mW
Vg2	= max.	45	V
Wg2	= max.	6	mW
Ik	= max.	0,6	mA
Vg1 (Ig1 = +0,3 μA)	= max.	-0,2	V
Rg1	= max.	10	MΩ
Vf	= max.	1,55	V
Vf	= min.	0,9	V

[1]) The input damping of the valve is about 3.5 MΩ in this case
l'Amortissement d'entrée est d'environ 3,5 MΩ en ce cas
Die Eingangsdämpfung ist in diesem Fall etwa 3,5MΩ

PHILIPS

Operating characteristics
Caracteristiques d'utilisation
Betriebsdaten

V_b	=	22,5		22,5		V
R_a	=	0,1		0,1		MΩ
R_{g1}	=	10[1])		3		MΩ
R_k	=	0		4		kΩ
V_i	=	0	0,45	0	0,67	V_{eff}
I_a	=	0,5	0,34	0,20	0,19	mA
I_{g2}	=	0,095	0,09	0,04	0,07	mA
W_o	=	0	1,8	0	1,6	mW
d_{tot}	=	-	10	-	10	%

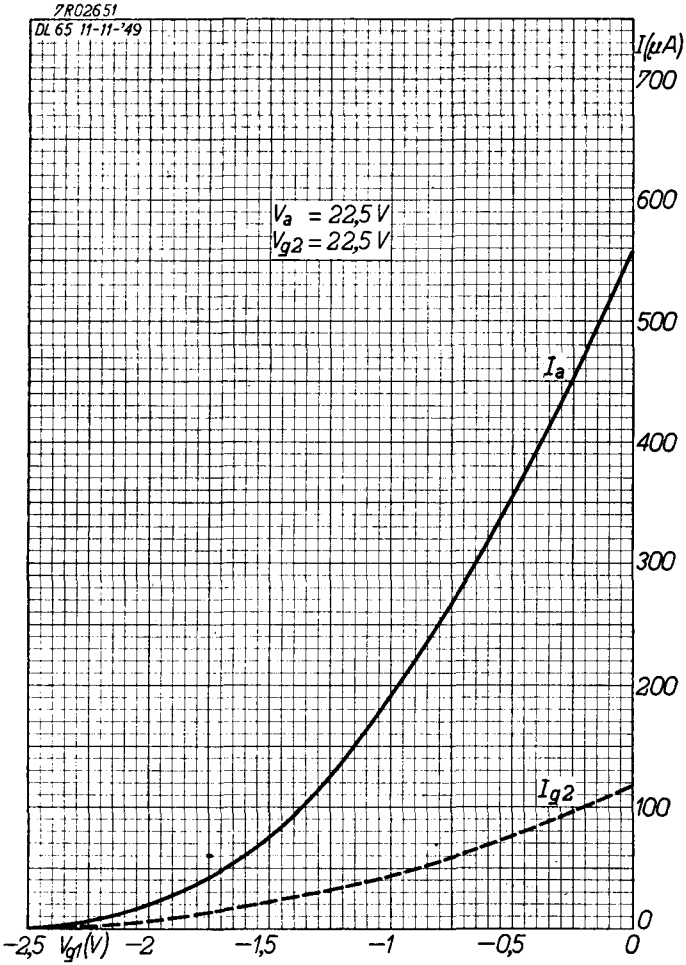


Limiting values
Caracteristiques limites
Grenzdaten

V_a	=	max.	45	V
W_a	=	max.	25	mW
V_{g2}	=	max.	45	V
W_{g2}	=	max.	6	mW
I_k	=	max.	0,6	mA
V_{g1} (I_{g1} = +0,3 μA)	=	max.	-0,2	V
R_{g1}	=	max.	10	MΩ
V_f	=	max.	1,55	V
V_f	=	min.	0,9	V

[1]) The input resistance of the tube is about 3.5 MΩ in this case
La résistance d'entrée du tube est de 3,5 MΩ environ en ce cas
Die Eingangswiderstand der Röhre beträgt etwa 3,5 MΩ in diesem Fall

"Miniwatt" DL 65

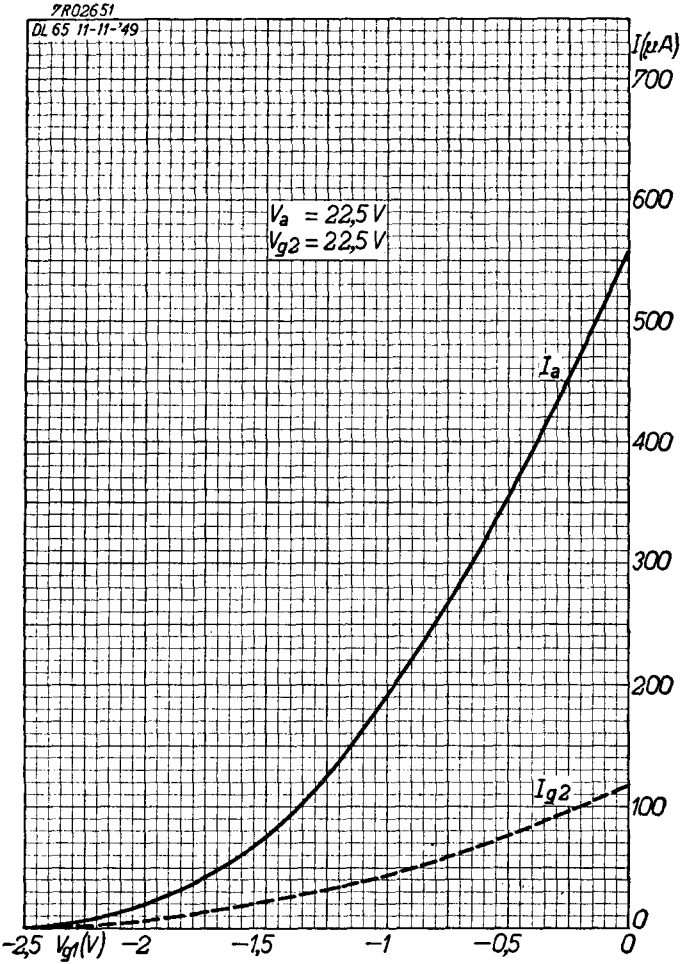


11.11.1949

A

PHILIPS

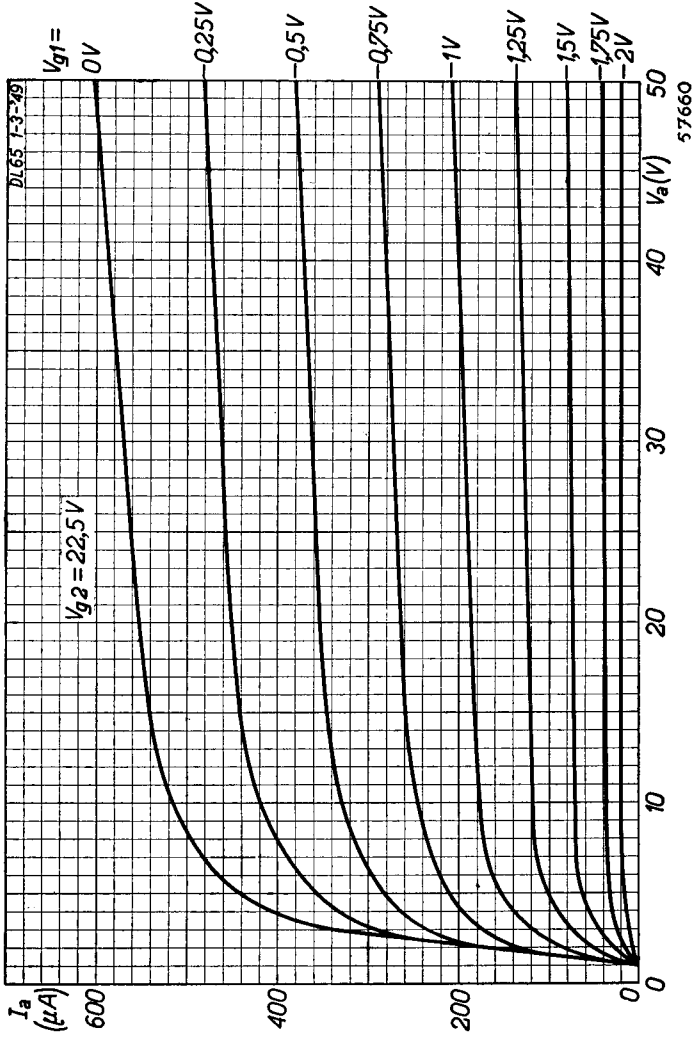
DL 65
DL 67



A

11.11.1953

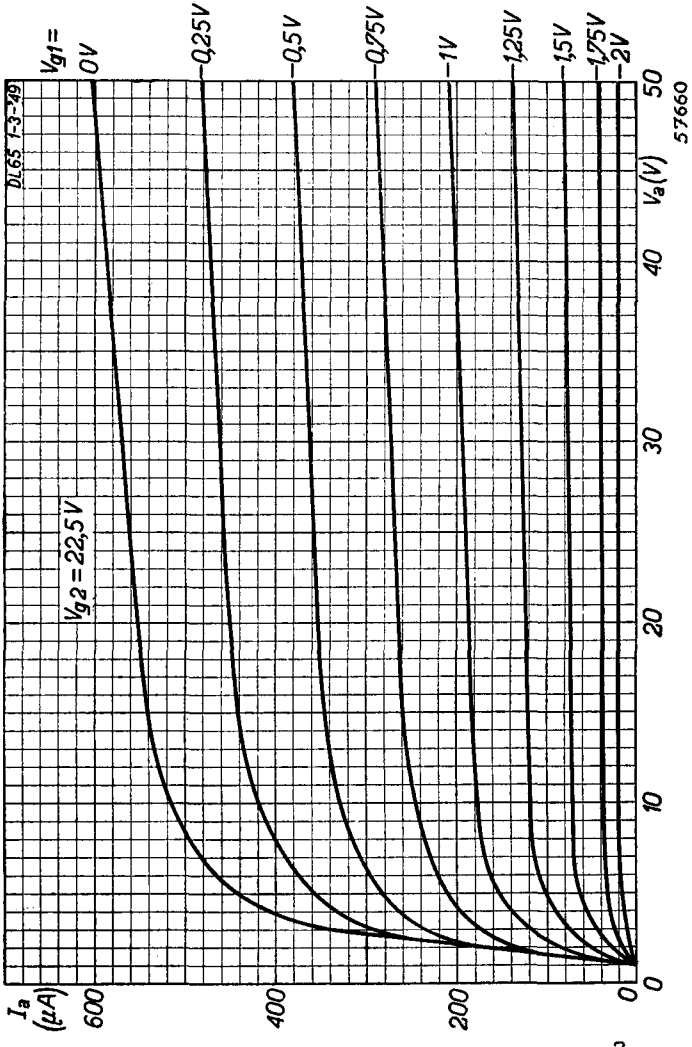
DL 65 "Miniwatt"



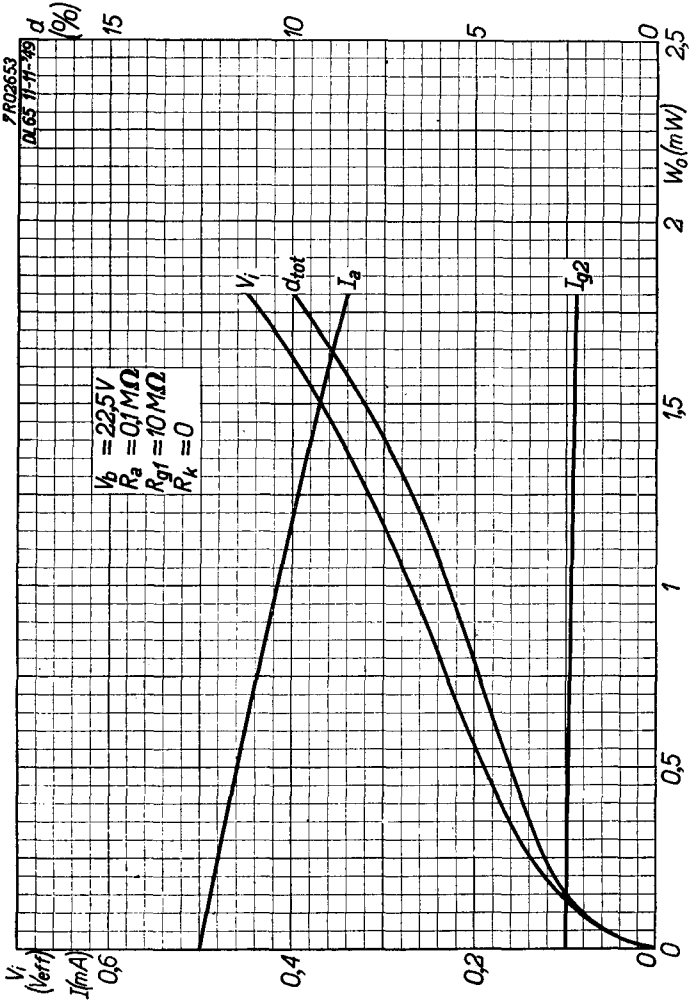
B

DL 65
DL 67

PHILIPS

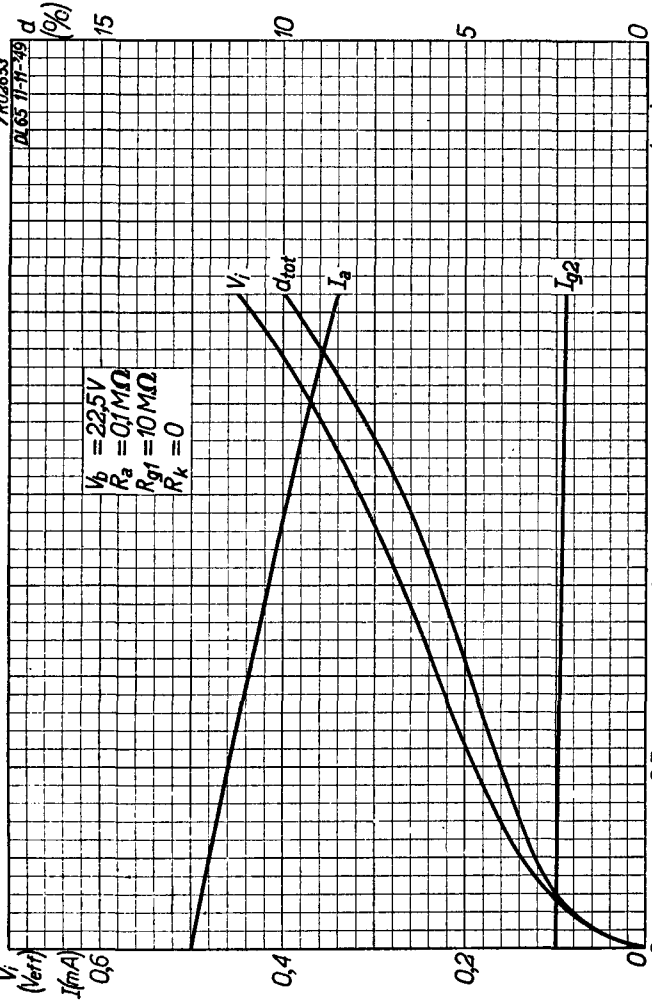


B


7R02653
DL65 11-11-49
d (%)
15
10
5
0
2,5
W_o (mW)
2
1,5
1
0,5
0
V_i
d_{tot}
I_a
I_{g2}
V_b = 22,5V
R_a = 0,1 MΩ
R_{g1} = 10 MΩ
R_k = 0
V_i (Veff)
I(mA)
0,6
0,4
0,2
0

PHILIPS

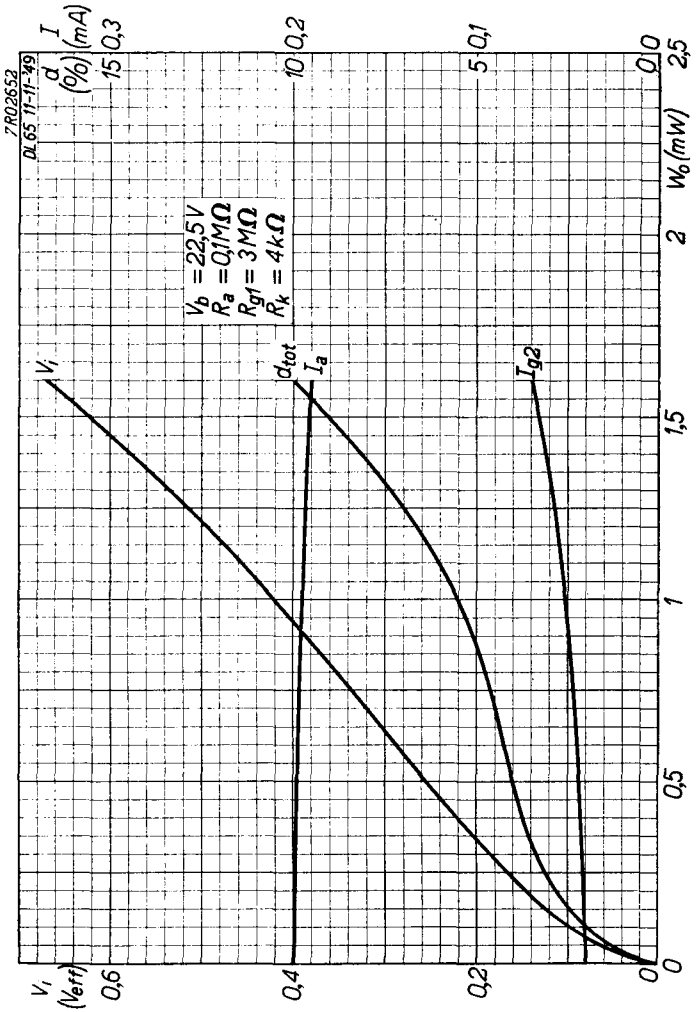
DL 65
DL 67



11.11.1953

c

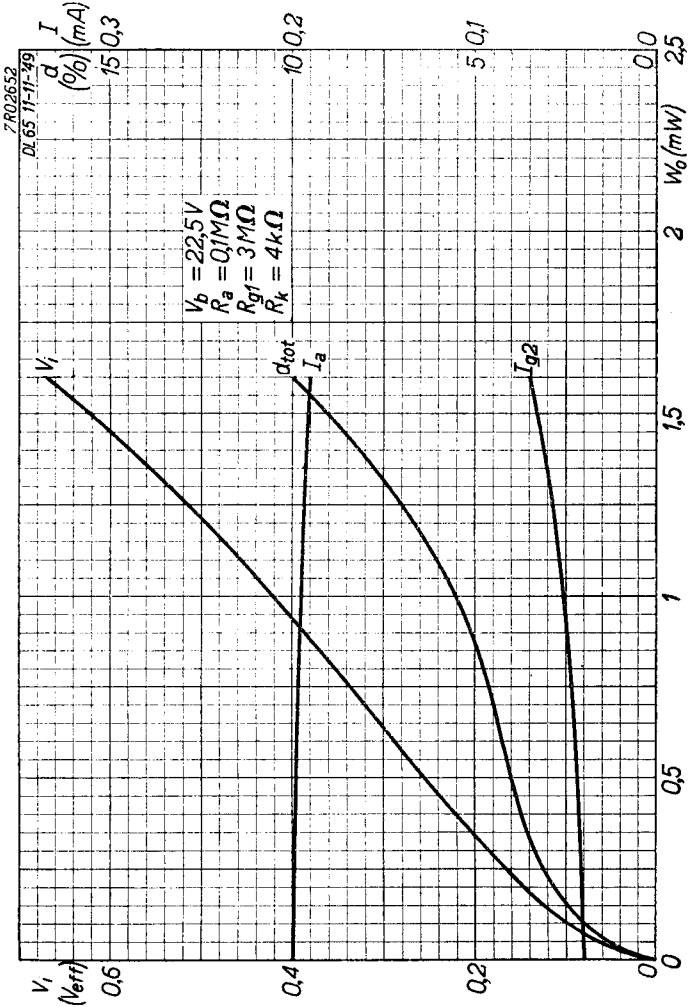
DL 65 "Miniwatt"



D

DL 65
DL 67

PHILIPS



D

PHILIPS

Electronic Tube HANDBOOK

DL65

page	sheet	date
1	1	1949.11.11
2	1	1953.11.11
3	2	1949.11.11
4	2	1953.11.11
5	A	1949.11.11
6	A	1953.11.11
7	B	1949.11.11
8	B	1953.11.11
9	C	1949.11.11
10	C	1953.11.11
11	D	1949.11.11
12	D	1953.11.11
13	FP	1999.08.22