

A.F. PENTODE for hearing aids
 PENTHODE B.F. pour appareils de sourds
 N.F. PENTHODE für Schwerhörigergeräte

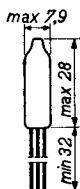
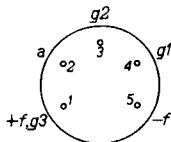
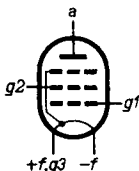
Heating: direct by D.C.;
 series or parallel supply

Chauffage: direct par C.C.;
 alimentation en série ou
 en parallèle

Heizung: direkt durch Gleichstrom;
 Serien- oder Parallelspei-
 sung

$V_f = 0,625 \text{ V}$
 $I_f = 13,3 \text{ mA}$

Dimensions in mm
 Dimensions en mm
 Abmessungen in mm



Capacitances
 Capacités
 Kapazitäten

$C_{g1} = 1,5 \text{ pF}$
 $C_a = 1,5 \text{ pF}$
 $C_{ag1} < 0,2 \text{ pF}$

Typical characteristics
 Caractéristiques typiques
 Kenndaten

$V_a = 22,5 \text{ V}$
 $V_{g2} = 18 \text{ V}$
 $V_{g1} = -1,15 \text{ V}$
 $I_a = 0,05 \text{ mA}$
 $I_{g2} = 0,01 \text{ mA}$
 $S = 0,1 \text{ mA/V}$
 $R_i = 4 \text{ M}\Omega$
 $\mu_{g2g1} = 8,7$

A.F. SUBMINIATURE PENTODE for hearing aids
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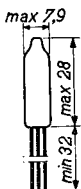
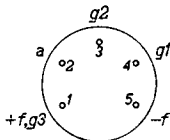
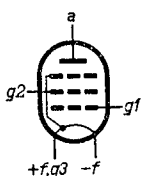
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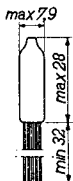
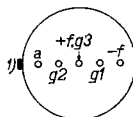
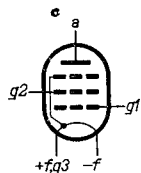
$I_f = 13,3 \text{ mA}$

Dimensions in mm Dimensions en mm
 Abmessungen in mm

DF 65



DF 67



Base, culot, Sockel: Subminiature

Capacitances

$C_{g1} = 1,5 \text{ pF}$

Capacités

$C_a = 1,5 \text{ pF}$

Kapazitäten

$C_{ag1} < 0,2 \text{ pF}$

Typical characteristics

Caractéristiques types

Kenndaten

$V_a = 22,5 \text{ V}$

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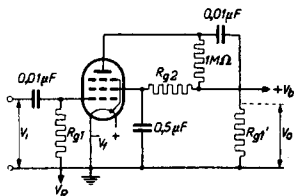
$S = 0,1 \text{ mA/V}$

$R_i = 4 \text{ M}\Omega$

$\mu_{g2g1} = 8,7$

1) Red spot
 Point rouge
 Roter Punkt

Operating characteristics
 Caractéristiques d'utilisation
 Betriebsdaten



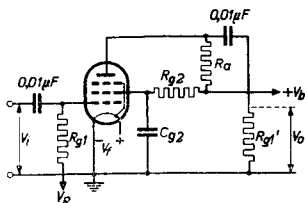
V_b (V)	V_R (V)	R_{g1} (M Ω)	R_{g2} (M Ω)	$R_{g1'}$ (M Ω)	I_a (μ A)	I_{g2} (μ A)	V_o V_i	d_{tot} (%) $V_o=3V_{eff}$
22,5	0	10 ¹)	3,9	5	11,7	2,5	31	5
22,5	-0,63	5	2,7	10	11,8	3,0	30	5
22,5	0	10 ¹)	3,9	5	11,7	2,5	28	5
22,5	-0,63	5	2,7	10	11,8	3,0	30	5

Limiting values
 Caractéristiques limites
 Grenzdaten

V_a	= max.	45 V
W_a	= max.	1,5 mW
V_{g2}	= max.	45 V
W_{g2}	= max.	0,5 mW
V_{g1} ($I_{g1} = +0,3 \mu A$)	= max.	-0,2 V
I_k	= max.	75 μA
R_{g1}	= max.	10 M Ω
V_f	= max.	0,78 V
V_f	= min.	0,45 V

¹) The input damping of the valve is about 6 M Ω in this case
 l'Amortissement d'entrée est de 6 M Ω environ en ce cas
 Die Eingangsdämpfung der Röhre beträgt etwa 6 M Ω in diesem Fall

Operating characteristics
Caractéristiques d'utilisation
Betriebsdaten



V_b	15	15	22,5	22,5	22,5	V
V_R	0	-0,63	0	-0,63	0	V
R_a	1	1	1	1	4,7	MΩ
R_{g2}	3,9	2,7	3,9	2,7	18	MΩ
R_{g1}	10^1)	5	10^1)	5	10	MΩ
R_{g1}'	5	10	5	10	10	MΩ
C_{g2}	0,5	0,5	0,5	0,5	0,002	μF
I_a	-	-	11,7	11,8	-	μA
I_{g2}	-	-	2,5	3,0	-	μA
$\frac{V_o}{V_i}$	19	22	31	30	33	
$d_{tot}(V_o=3V_{eff})$	9	9	5	5	7	%

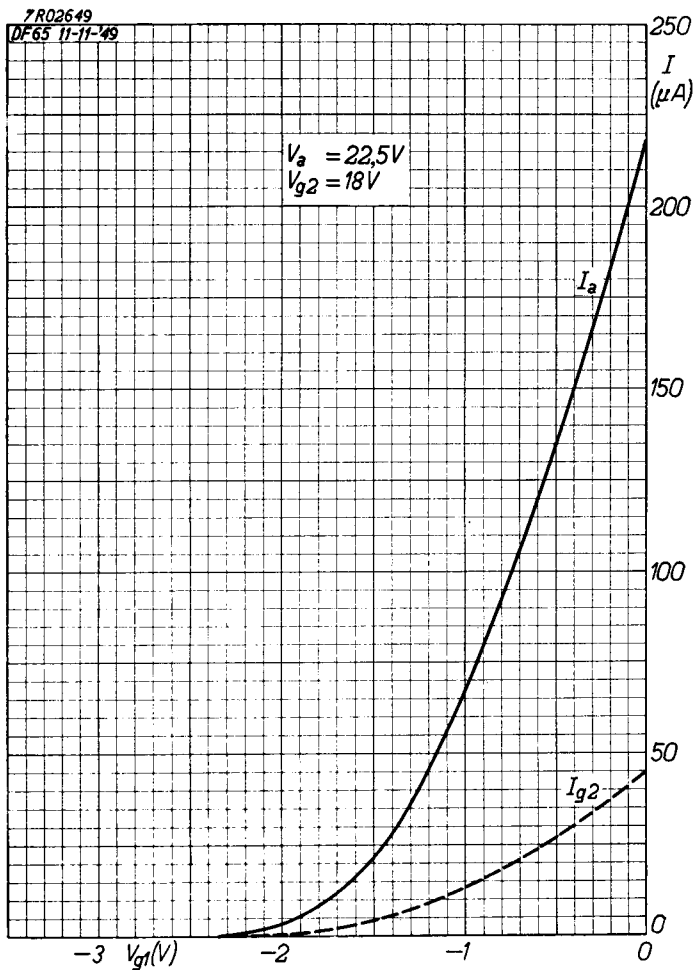
Limiting values
Caractéristiques limites
Grenzdaten

V_a	= max. 45 V	$V_{g1}(I_{g1}=+0,3\mu A)$	= max. -0,2 V
W_a	= max. 1,5 mW	I_k	= max. 75 μA
V_{g2}	= max. 45 V	R_{g1}	= max. 10 MΩ
W_{g2}	= max. 0,5 mW	V_f	= max. 0,78 V
		V_f	= min. 0,45 V

1) The input resistance of the tube is about 4 MΩ in this case
La résistance d'entrée du tube est de 4 MΩ environ en ce cas
Die Eingangsdämpfung der Röhre beträgt etwa 4 MΩ in diesem Fall

"Miniwatt"

DF 65

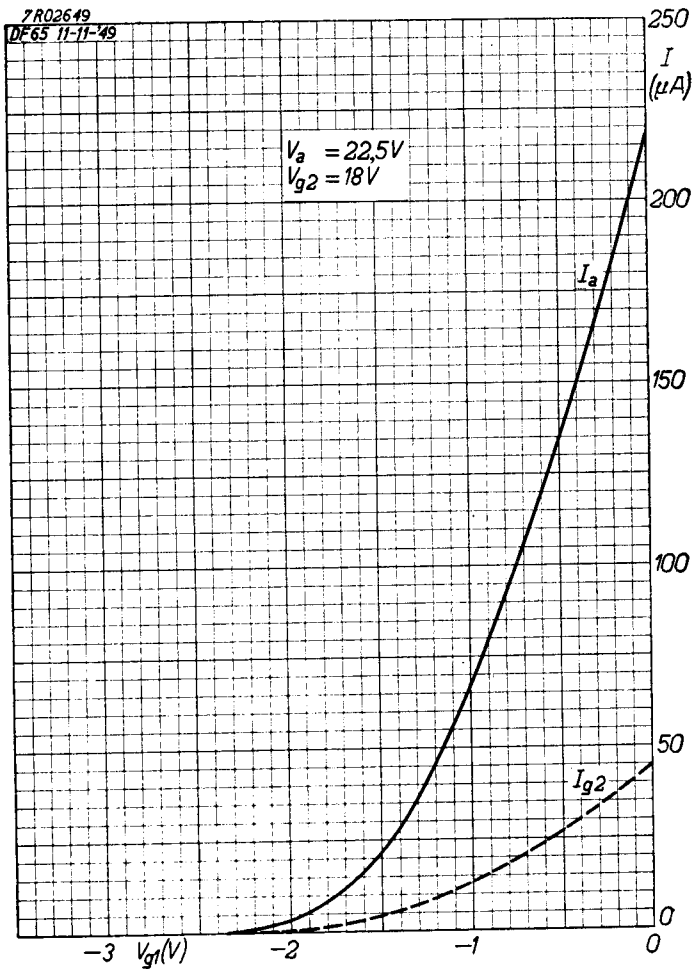


11.11.1949

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DF 65
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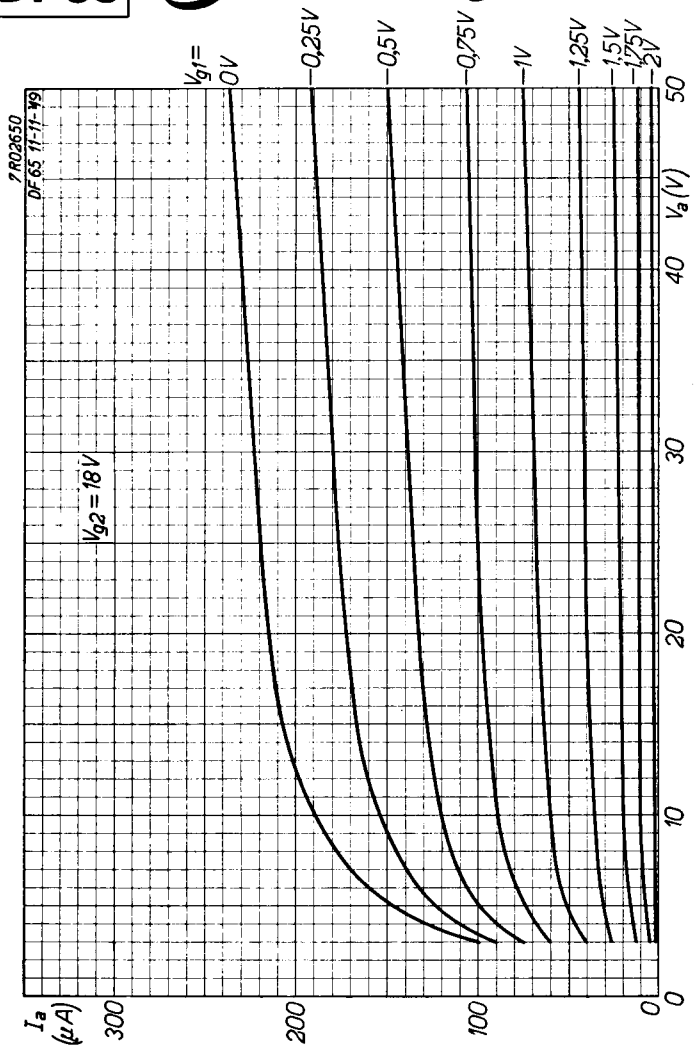


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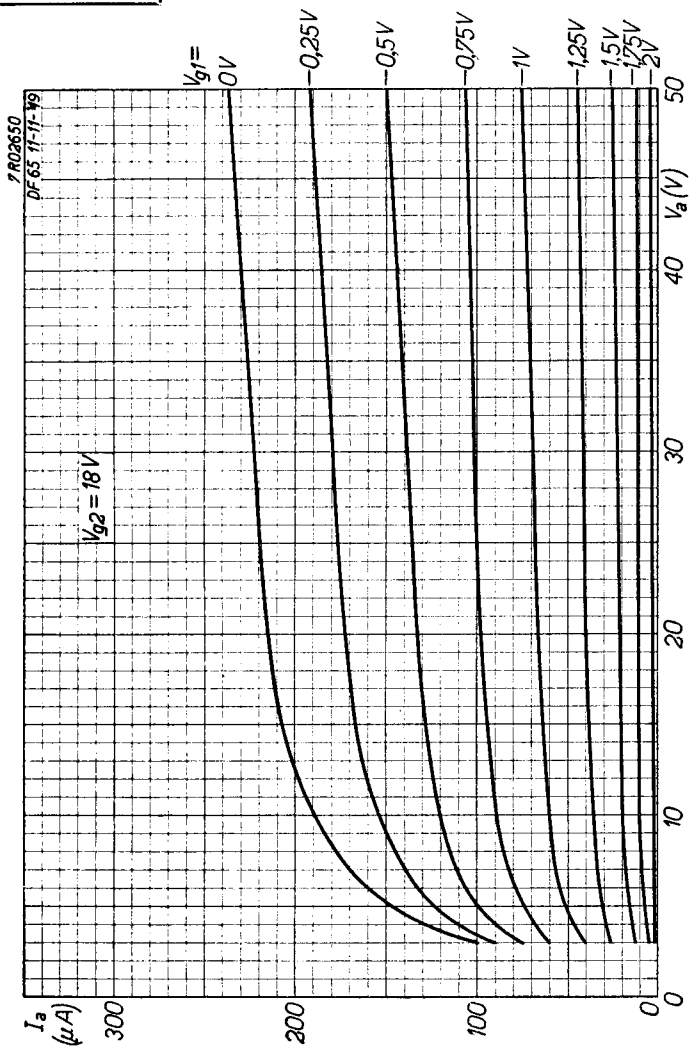
DF 65

Miniwatt



DF 65
DF 67

PHILIPS



PHILIPS

*Electronic
Tube*

HANDBOOK

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6	A	1953.10.10
7	B	1949.11.11
8	B	1953.10.10
9	FP	2000.03.10