

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

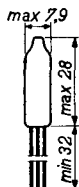
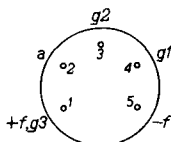
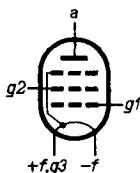
Heating: direct by D.C.;
 series or parallel supply

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

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

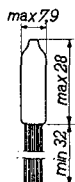
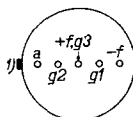
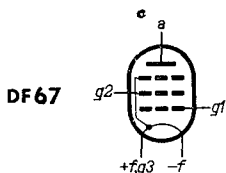
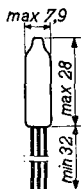
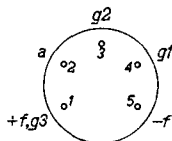
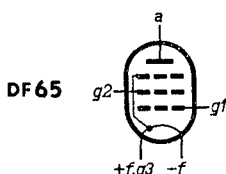
A.F. SUBMINIATURE PENTODE for hearing aids
PENTHODE SUBMINIATURE B.F. pour appareils de sourds
NF-SUBMINIATURPENTODE für Schwerhörigengeräte

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

Chauffage: direct par C.C.
alimentation en série ou en parallèle $V_f = 0,625 \text{ V}$

Heizung : direkt durch Gleichstrom
Serien-oder Parallelspeisung $I_f = 13,3 \text{ mA}$

Dimensions in mm Dimensions en mm
Abmessungen in mm



Base, culot, Sockel: Subminiature

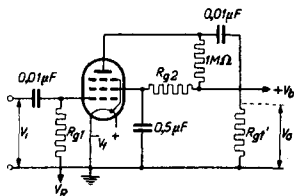
Capacitances	C_{g1}	=	1,5 pF
Capacités	C_a	=	1,5 pF
Kapazitäten	C_{ag1}	<	0,2 pF

Typical characteristics
Caractéristiques types
Kenndaten

V_a	=	22,5 V
V_{g2}	=	18 V
V_{g1}	=	-1,15 V
I_a	=	0,05 mA
I_{g2}	=	0,01 mA
S	=	0,1 mA/V
R_i	=	4 MΩ
μ_{g2g1}	=	8,7

¹) Red spot
Point rouge
Roter Punkt

Operating characteristics
Caractéristiques d'utilisation
Betriebsdaten



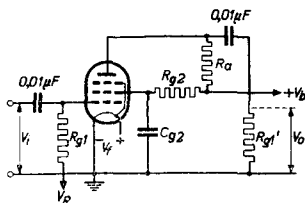
V_b (V)	V_R (V)	R_{g1} (MΩ)	R_{g2} (MΩ)	$R_{g1'}$ (MΩ)	I_a (μA)	I_{g2} (μA)	$\frac{V_o}{V_i}$	d_{tot} (%) $V_o = 3V_{eff}$
22,5	0	10^1	3,9	5	11,7	2,5	31	5
22,5	-0,63	5	2,7	10	11,8	3,0	30	5
22,5	0	10^1	3,9	5	11,7	2,5	28	5
22,5	-0,63	5	2,7	10	11,8	3,0	30	5

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 MΩ
V_f	= max.	0,78 V
V_f	= min.	0,45 V

- ¹⁾ The input damping of the valve is about 6 MΩ in this case
l'Amortissement d'entrée est de 6 MΩ environ en ce cas
Die Eingangsdämpfung der Röhre beträgt etwa 6 MΩ 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
V_a	19	22	31	30	33	
V_i	19	22	31	30	33	
$d_{tot}(V_o=3V_{eff})$	9	9	5	5	7	%

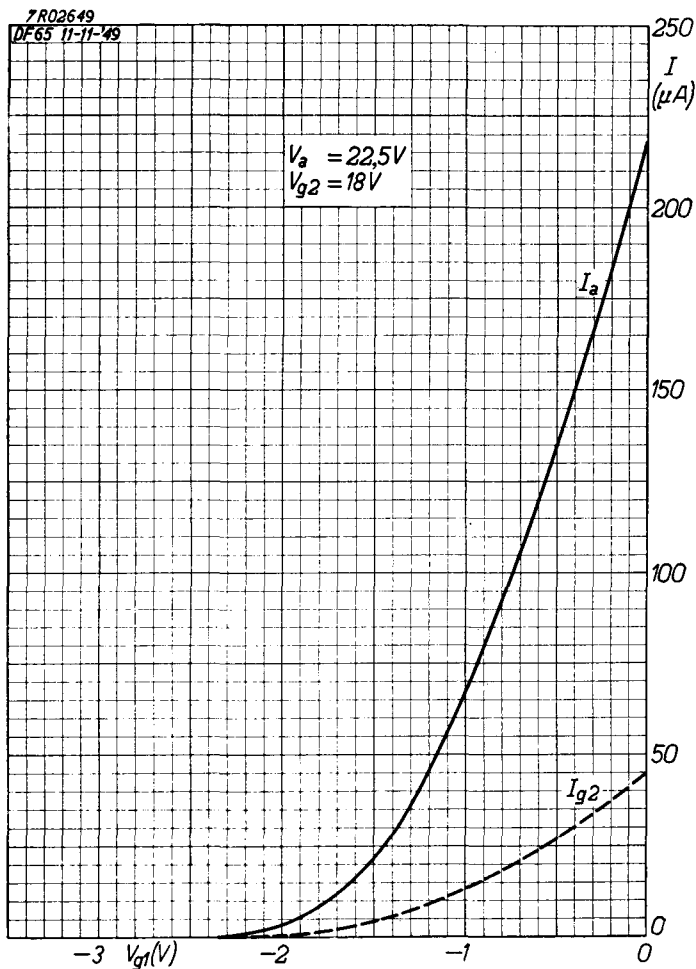
Limiting values
 Caractéristiques limites
 Grenzdaten

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

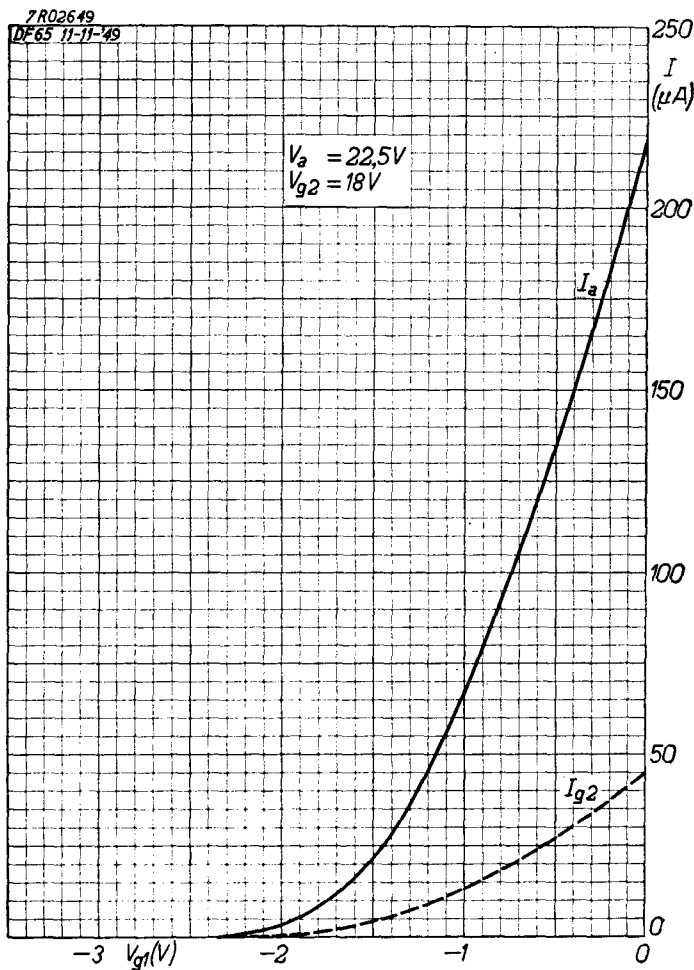


11.11.1949

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DF 65
DF 67

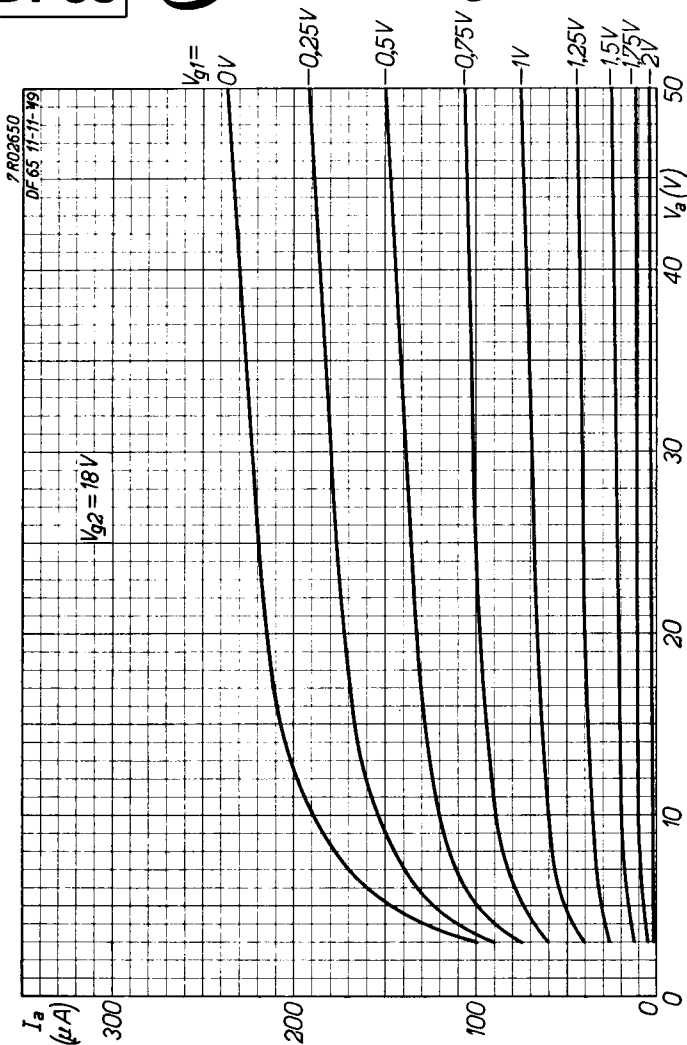


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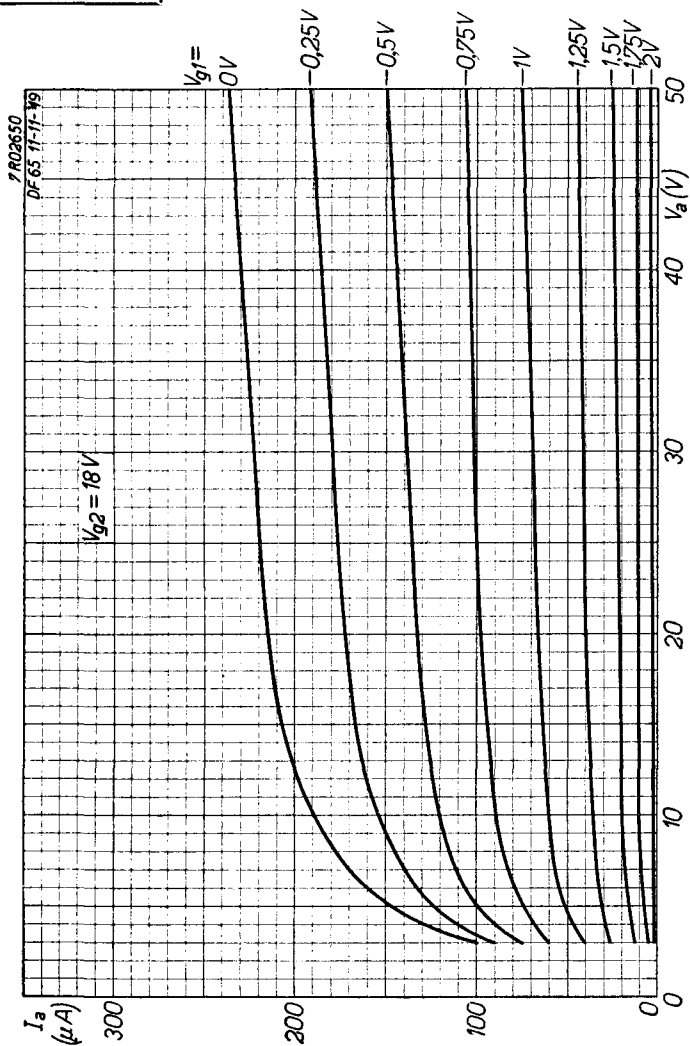
DF 65

"Miniwatt"



DF 65
DF 67

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2	1	1953.10.10
3	2	1949.11.11
4	2	1953.10.10
5	A	1949.11.11
6	A	1953.10.10
7	B	1949.11.11
8	B	1953.10.10
9	FP	2000.03.10