

PENTODE for use as H.F. and L.F. amplifier
 PENTHODE pour utilisation en amplificatrice H.F. et B.F.
 PENTODE zur Verwendung als H.F. und N.F. Verstärker

Cathode : oxide-coated
 Cathode : oxyde
 Kathode : Oxyd

Heating : indirect $V_f = 12,6 \text{ V}$
 Chauffage: indirect $I_f = 1,35 \text{ A}$
 Heizung : indirekt

Capacitances $C_a = 11 \text{ pF}$
 Capacités $C_{g1} = 20,5 \text{ pF}$
 Kapazitäten $C_{ag1} = 0,1 \text{ pF}$

Typical characteristics $\mu_{g2g1} = 6,7$
 Caractéristiques types $S (I_a=40 \text{ mA}) = 6 \text{ mA/V}$
 Kenndaten

λ	Freq.	C telegr.		B teleph.	
		V_a (V)	W_o (W)	V_a (V)	W_o (W)
>5	<60	1000	132	1000	23
		800	107	800	23
		600	78	600	23
>5	<60	C _{ag2} mod.		C _{g3} mod.	
		800	75	1000	27
		600	51	800	26
				600	22

B mod. ¹⁾	
V_a (V)	W_o (W)
1000	194
800	110
600	82

Limiting values
 Caractéristiques limites
 Grenzdaten

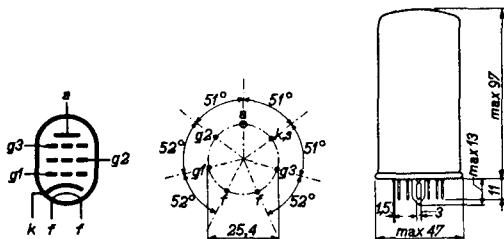
$V_a = \text{max. } 1000 \text{ V}$ $R_{g3} = \text{max. } 50 \text{ k}\Omega$
 $W_a = \text{max. } 45 \text{ W}$ $R_{g1} = \text{max. } 25 \text{ k}\Omega$ ²⁾
 $V_{g2} = \text{max. } 300 \text{ V}$ $R_{g1} = \text{max. } 50 \text{ k}\Omega$ ³⁾
 $W_{g2} = \text{max. } 7 \text{ W}$ $I_k = \text{max. } 240 \text{ mA}$
 $W_{g1} = \text{max. } 0,5 \text{ W}$ $I_{kp} = \text{max. } 1,5 \text{ A}$
 $V_{kf} = \text{max. } 100 \text{ V}$

¹⁾ Two valves; deux tubes; zwei Röhren

²⁾ With fixed grid bias; à polarisation fixe; mit fester Gittervorspannung

³⁾ With automatic grid bias; à polarisation automatique; mit automatischer Gittervorspannung

Dimensions in mm
 Dimensions en mm
 Abmessungen in mm



Base, culot, Sockel: Septar

Socket
 Support
 Fassung

40202

Mounting position: arbitrary
 Montage : arbitrairement
 Aufstellung : willkürlich

Net weight
 Poids net
 Nettogewicht

30 g

Shipping weight
 Poids brut
 Bruttogewicht

125 g

Operating conditions H.F. class C telegraphy
 Caractéristiques d'utilisation H.F. classe C télé-
 graphie
 Betriebsdaten H.F. Klasse C Telegraphie

λ	=	>5	>5	>5	m
V_a	=	1000	800	600	V
V_{g1}	=	-120	-110	-100	V
V_{g2}	=	250	250	250	V
V_{g3}	=	0	0	0	V
I_a	=	177	190	205	mA
I_{g1}	=	5	6	7,5	mA
I_{g2}	=	28	28	28	mA
V_{g1p}	=	144	134	124	V
W_{g1}	=	0,65	0,73	0,84	W
W_{g2}	=	7	7	7	W
W_{ia}	=	177	152	123	W
W_a	=	45	45	45	W
W_o	=	132	107	78	W
η	=	74,5	70,5	63,5	%

Operating conditions H.F. class B telephony
 Caractéristiques d'utilisation H.F. classe B télé-
 phonie
 Betriebsdaten H.F. Klasse B Telephonie

λ	=	>5	>5	>5	m
V_a	=	1000	800	600	V
V_{g1}	=	-34	-33	-30,5	V
V_{g2}	=	250	250	250	V
V_{g3}	=	0	0	0	V
I_a	=	68	85	114	mA
I_{g2}	=	4,5	6	7,5	mA
V_{g1p}	=	20,5	22,5	26,5	V
W_{g2}	=	1,15	1,5	1,9	W
W_{ia}	=	68	68	68,4	W
W_a	=	45	45	45	W
W_o	=	23	23	23,4	W
η	=	34	34	34	%

m	=	100	100	100	%
I_{g1}	=	2	4	8	mA
W_{ig1}	=	0,08	0,17	0,38	W

Operating conditions H.F. class C
 Caractéristiques d'utilisation H.F. classe C
 Betriebsdaten HF- Klasse C

anode and screen grid modulation modulation d'anode et de grille-écran Anoden- und Schirmgitter- modulation	suppressor grid modulation modulation de grille d'ar- rêt Fanggittermodulation
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λ	=	25	25	25	m
V_a	=	800	600	1000	V
V_{g1}	=	-120	-120	-100	V
V_{g2}	=	250	250	150	V
V_{g3}	=	0	0	-100	V
I_a	=	120	120	72	mA
I_{g1}	=	6,5	6,5	10	mA
I_{g2}	=	23	23	24	mA
V_{g1p}	=	150	150	140	V
W_{ig1}	=	0,9	0,9	1,3	W
W_{ig2}	=	5,8	5,8	3,6	W
W_{ia}	=	96	72	72	W
W_a	=	21	21	45	W
W_o	=	75	51	27	W
η	=	78	71	37,5	%
m	=	100	100	100	%
V_{g2p}	=	250	250	-	V
V_{g3p}	=	-	-	100	V
W_{mod}	=	48	36	0	W

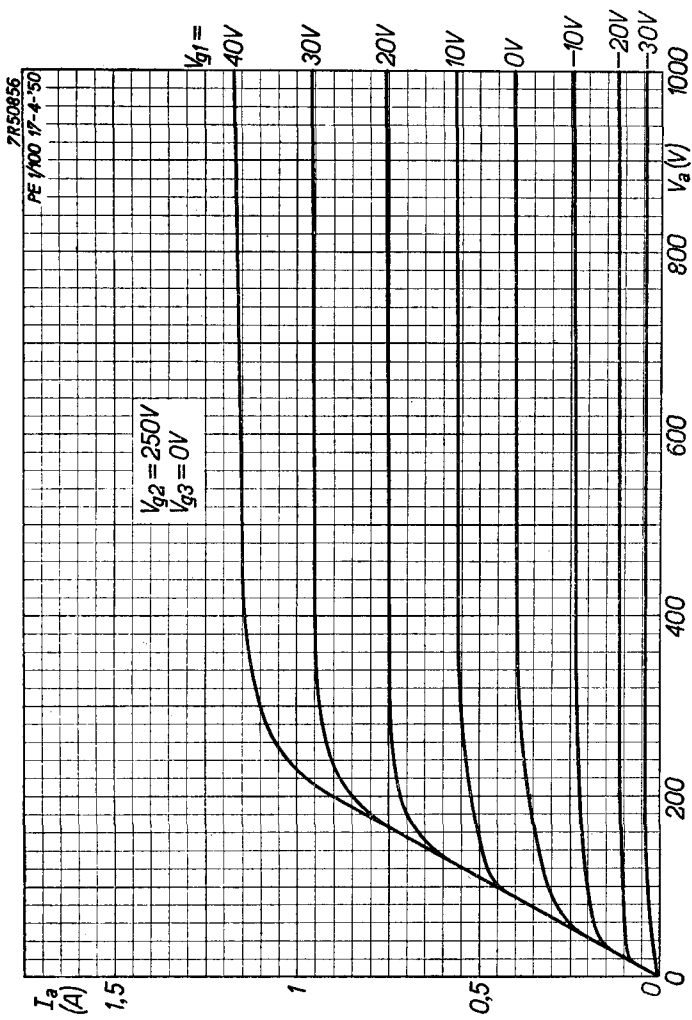
Operating conditions as L.F. class B amplifier and modulator, two valves

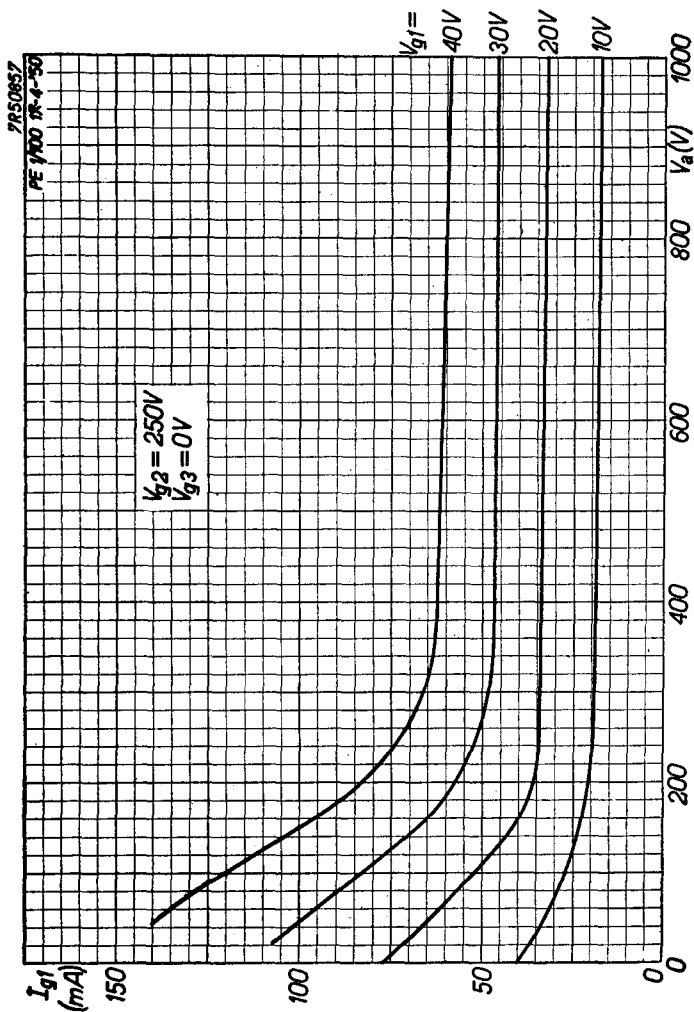
Caractéristiques d'utilisation comme amplificateur et modulateur B.F. classe B, deux tubes

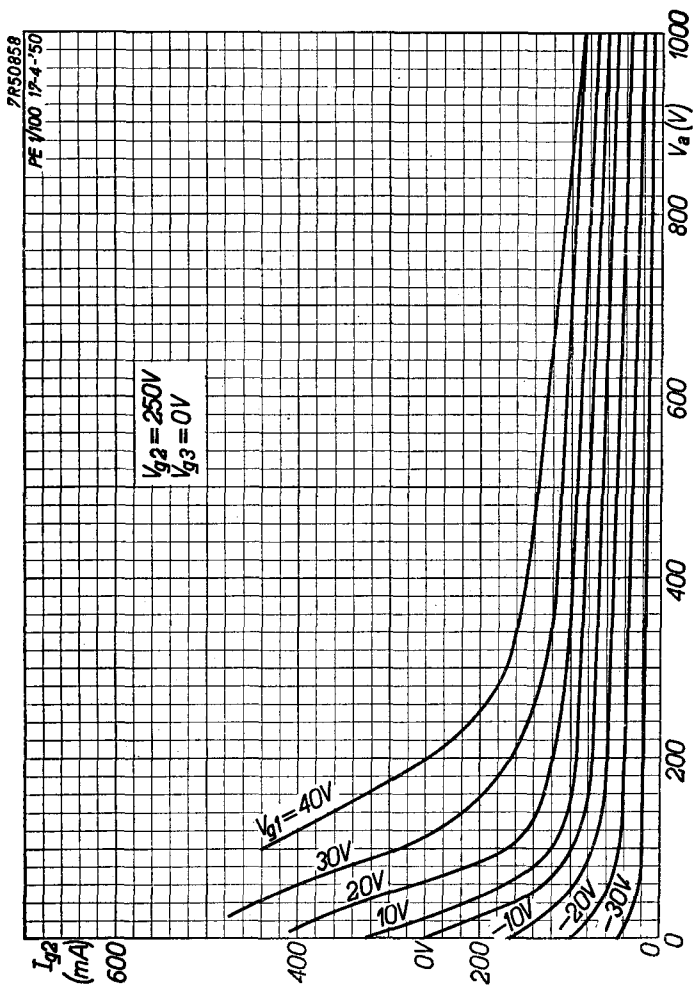
Betriebsdaten als N.F. Verstärker und Modulator Klasse B, zwei Röhren

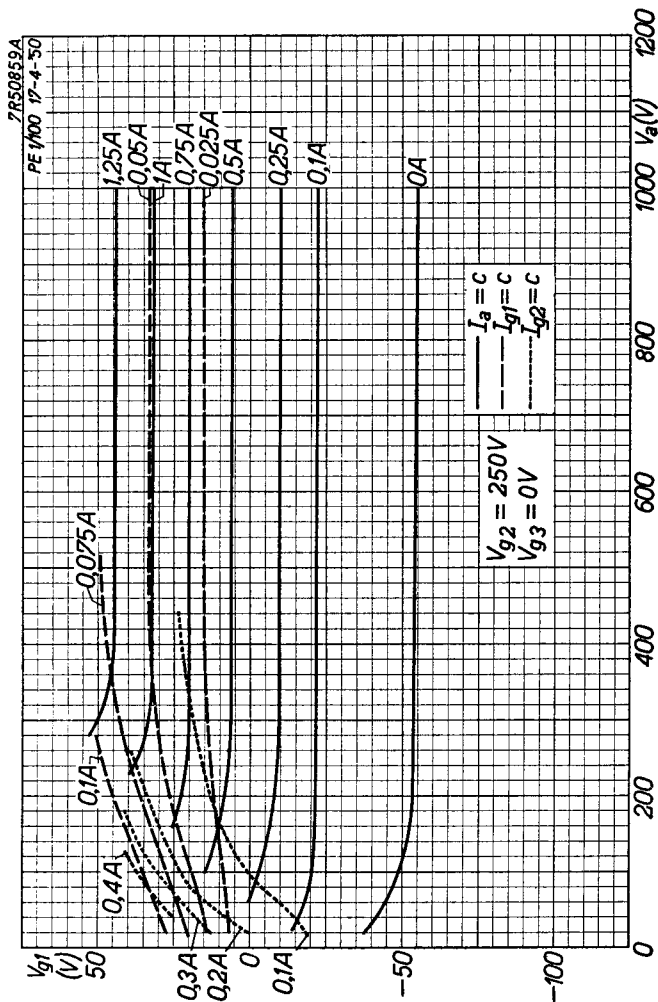
V_a	=	1000		800	V	
V_{g1}	=	-34		-33,5	V	
V_{g2}	=	250		250	V	
V_{g3}	=	0		0	V	
R_{aa}	=	8800		7560		Ω
V_{g1g1p}	=	0	84	0	68	V
I_a	=	2x26	2x134	2x28	2x108	mA
I_{g1}	=	0	2x0,8	0	0	mA
I_{g2}	=	2x5	2x28	2x8	2x27	mA
W_{ig1}	=	0	2x0,03	0	0	W
W_{g2}	=	2x1,3	2x7	2x2	2x6,8	W
W_{ia}	=	2x26	2x134	2x22,4	2x86,4	W
W_a	=	2x26	2x37	2x22,4	2x31,4	W
W_o	=	0	194	0	110	W
η_{tot}	=	-	5	-	4,5	%
η	=	-	72	-	63,5	%

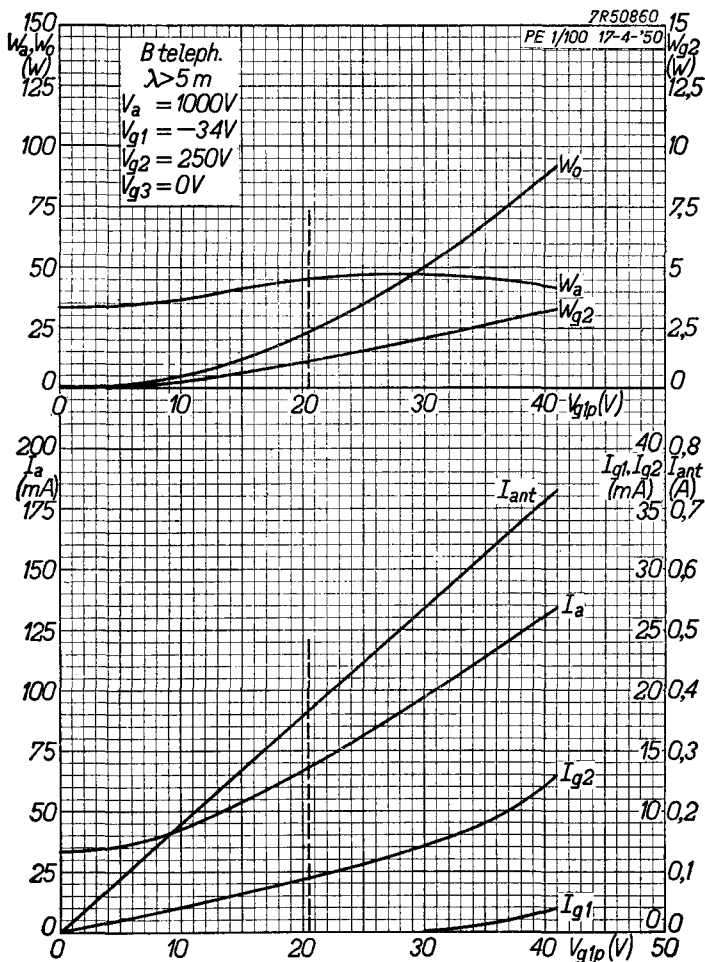
V_a	=	500		V
V_{g1}	=	-33		V
V_{g2}	=	250		V
V_{g3}	=	0		V
R_{aa}	=	6320		Ω
V_{g1g1p}	=	0	66	V
I_a	=	2x28	2x102	mA
I_{g1}	=	0	0	mA
I_{g2}	=	2x11	2x28	mA
W_{ig1}	=	0	0	W
W_{g2}	=	2x2,8	2x7	W
W_{ia}	=	2x16,8	2x61,2	W
W_a	=	2x16,8	2x20,2	W
W_o	=	0	82	W
η_{tot}	=	-	3,3	%
η	=	-	67	%





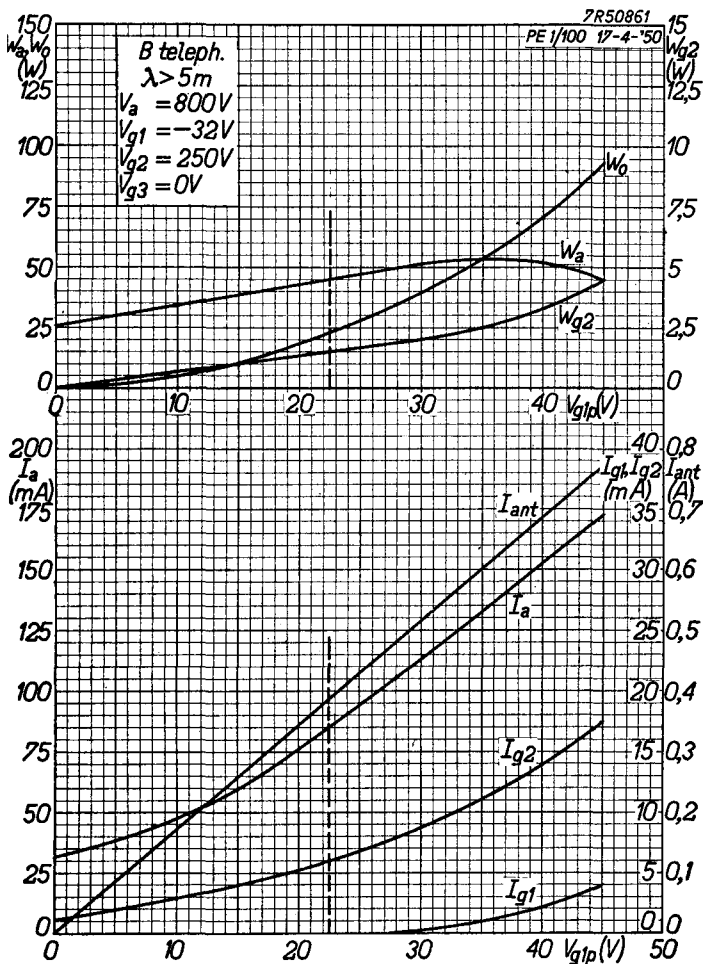


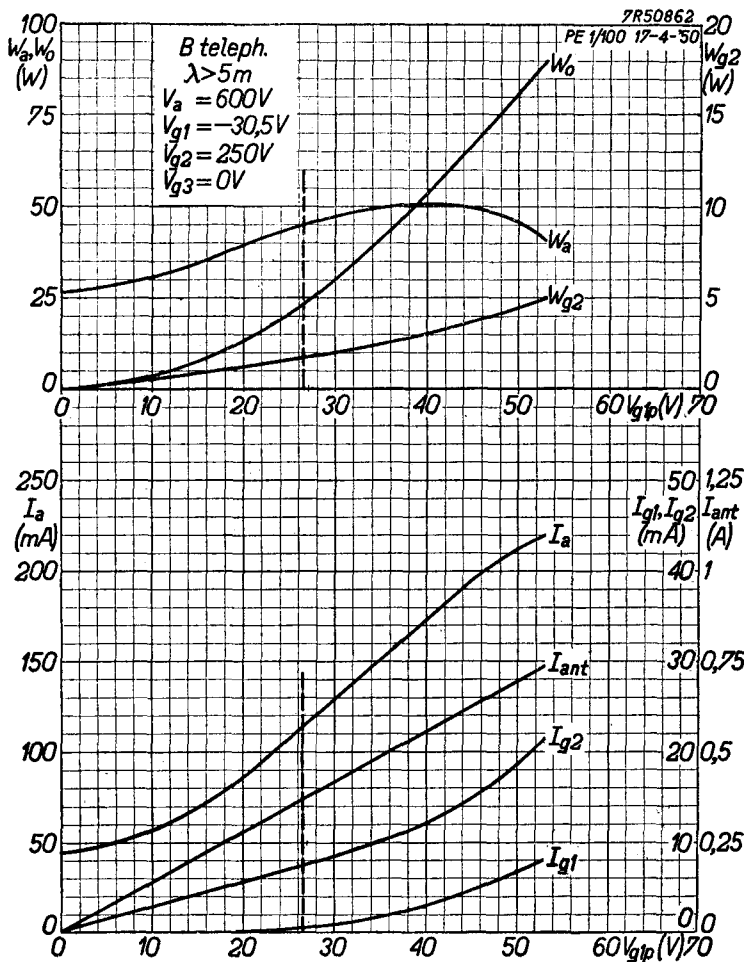




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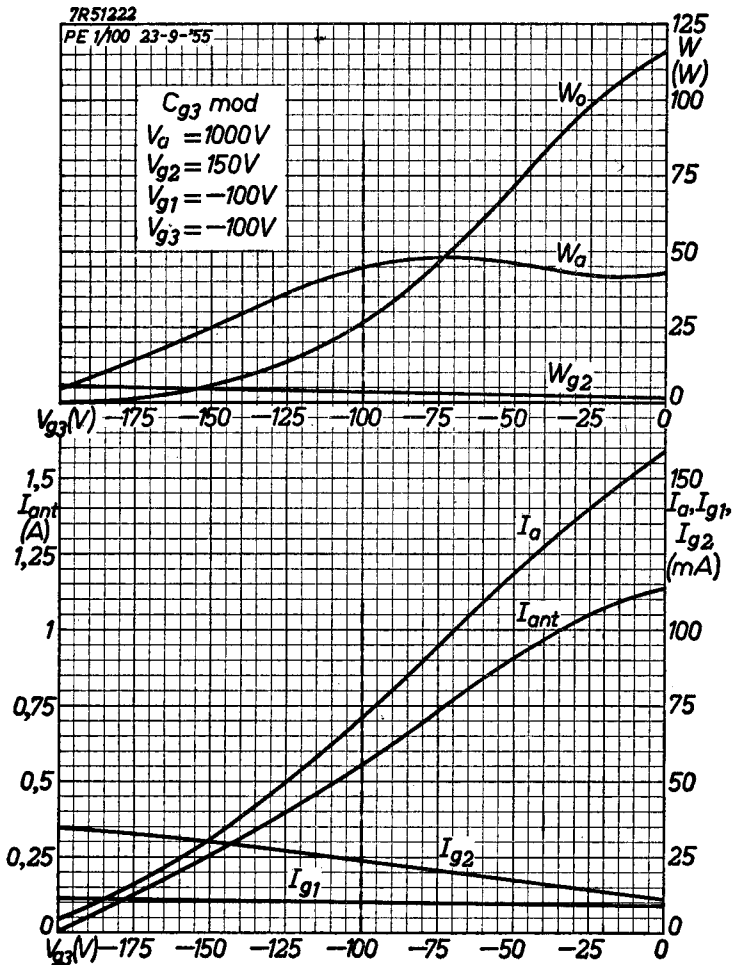
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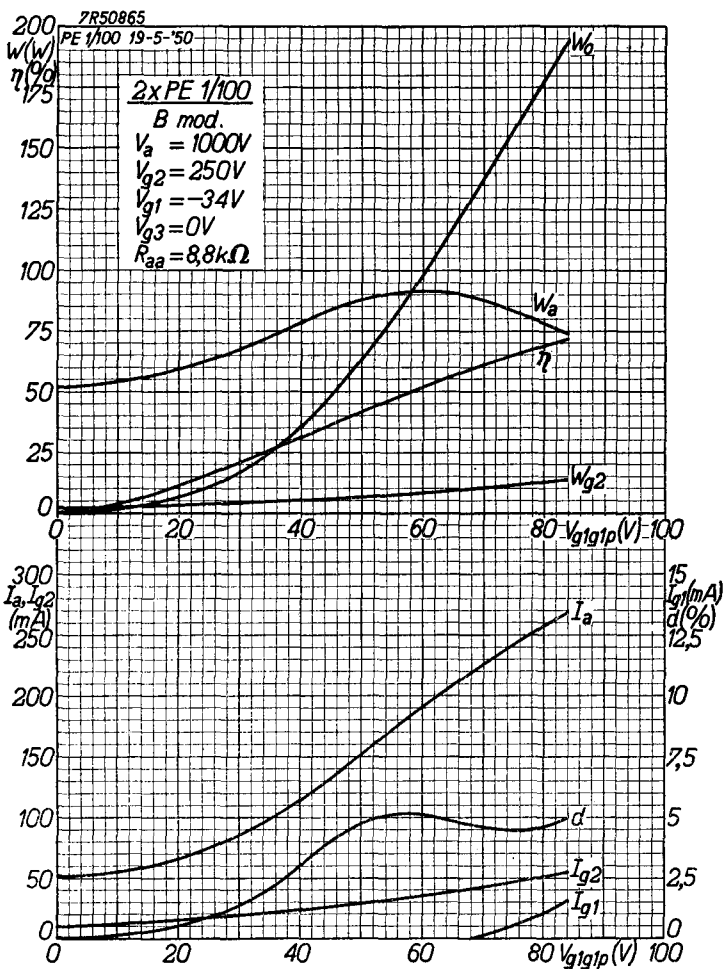




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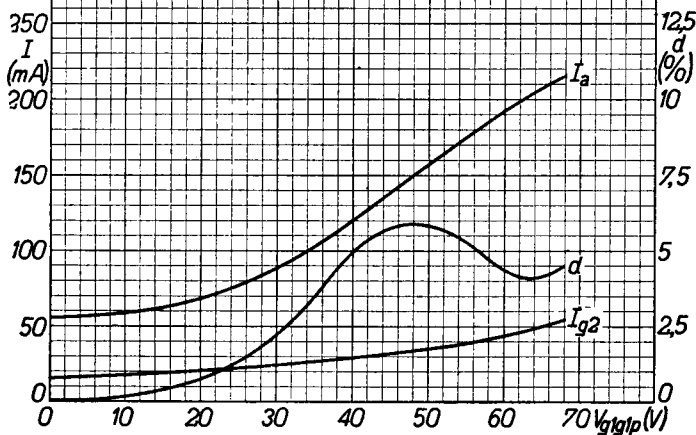
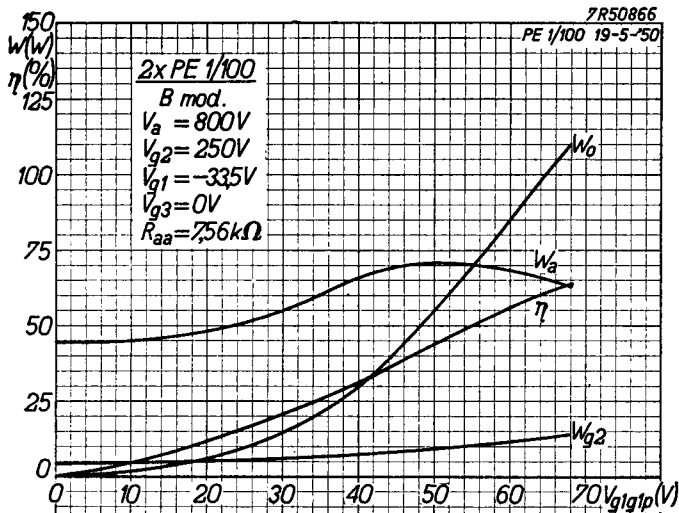


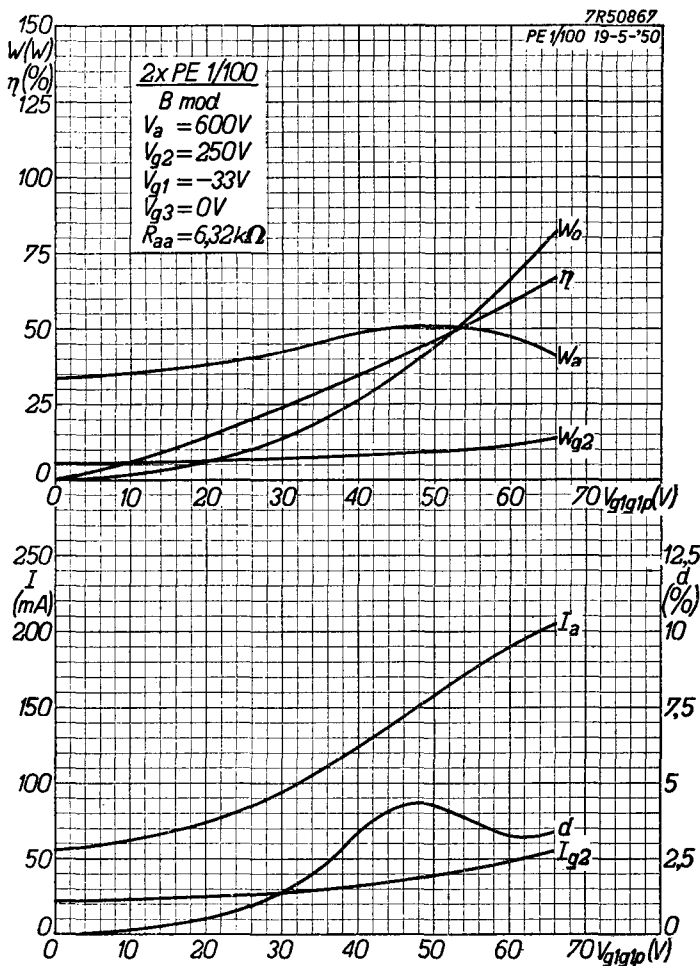
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2	2	1959.02.02
3	3	1955.10.10
4	4	1955.10.10
5	5	1954.07.07
6	A	1954.07.07
7	B	1954.07.07
8	C	1954.07.07
9	D	1954.07.07
10	E	1954.07.07
11	F	1954.07.07
12	G	1955.10.10
13	H	1955.10.10
14	I	1956.01.01
15	J	1956.01.01
16	K	1956.01.01
17	FP	2000.05.05