DOUBLE TETRODE for use as H.F. amplifier or oscillator, frequency multiplier or modulator
DOUBLE TETRODE pour utilisation en amplificatrice ou oscillatrice H.F., multiplicatrice de fréquence ou modulatrice
DOPPELTETRODE zur Verwendung als HF-Verstärker. oder Oszillator, Frequenzvervielfacher oder Modulator

Filament : oxide-coated			
Filament : oxyde	V_f =	3-3,15[1])	6-6,3 V[1])
Heizfaden: Oxyd	I_f =	1,36	0,68 A
Heating : direct	Pins		
Chauffage: direct	Broches	3-(1+5)	1-5
Heizung : direkt	Stifte		

Capacitances / Capacités / Kapazitäten	per system / par système / pro System	in push-pull / en push-pull / in Gegentakt
	C_a = 3,3 pF	C_o = 1,7 pF
	C_{g1} = 8,5 pF	C_i = 5,7 pF
	C_{ag1} = 0,05 pF	

Typical characteristics / Caractéristiques types / Kenndaten

μ_{g2g1} = 7,5

S[3]) (I_a= 20 mA) = 2 mA/V

λ	Freq.	C telegr.			Cag2 mod.			B mod	
m	Mc/s	V_a (V)	W_o[2]) (W)		V_a (V)	W_o[2]) (W)		V_a (V)	W_o (W)
			CCS	ICAS		CCS	ICAS	C.C.S	
5	60	600	26,6	35	450	17,5		450	18
		400	17,6	23,2	400	15,4		400	17
		250	10,6	14,0	250	6,2	8,2	350	16
1,6	186	600	25,6	33,6	250	6,0	7,8	250	9 ←
		400	16,8	22,0				I.C.A.S	
		250	10,2	13,2				600	28,2

		C fr.mult.			
4,8/1,6	62/186	400	7,2	10	tripler / tripleur / Verdreifacher
		250	4,6	6,2	
3,2/1,6	93/186	400	6,5	8,0	doubler / doubleur 3) / Verdoppler
		250	4,0	4,9	

1) Nominal values; valeurs nominales; Nennwerte

2) CCS = continous service; service continu; Dauerbetrieb

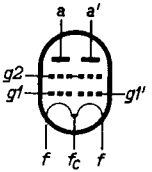
ICAS = intermittent service; service intermittent; aussetzender Betrieb

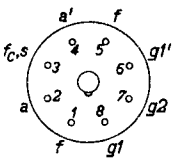
3) One system; un système; ein System

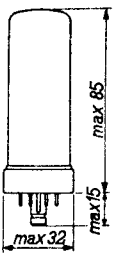
PHILIPS

Pin temperature Temp. des broches Stiftentemperatur	= max.	100 °C
Bulb temperature Temp. de l'ampoule Kolbentemperatur	= max.	200 °C

Dimensions in mm
Dimensions en mm
Abmessungen in mm







Base, culot, Sockel: Loctal

Socket
Support 40213
Fassung

Mounting position: vertical with base up or down
Horizontal with pins 1 and 5 in one horizontal plane

Montage : vertical avec le culot en haut ou en bas
Horizontal avec les broches 1 et 5 situées dans le même plan horizontal

Einbau : senkrecht mit Sockel oben oder unten
Waagerecht mit den Stiften 1 und 5 in einer waagerechten Ebene

Net weight Poids net Nettogewicht	40 g
Shipping weight Poids brut Bruttogewicht	55 g

H.F. class C telegraphy, two systems in push-pull
H.F. classe C télégraphie, deux systèmes en push-pull
HF Klasse C Telegraphie, zwei Systeme in Gegentakt

C.C.S. Limiting values, continuous service
Caractéristiques limites, service continu
Grenzdaten, Dauerbetrieb

f	= max.	186 Mc/s	f	= max.	300 Mc/s
V_a	= max.	600 V	V_a	= max.	450 V
W_{ia}	= max.	2x18 W	W_{ia}	= max.	2x9 W
W_a	= max.	2x6 W			
I_a	= max.	2x30 mA			
V_{g2}	= max.	250 V			
W_{g2}	= max.	7 W			
$-V_{g1}$	= max.	200 V			
I_{g1}	= max.	2x5 mA			

C.C.S. Operating conditions; continuous service
Caractéristiques d'utilisation; service continu
Betriebsdaten; Dauerbetrieb

f	=	60	60	60 Mc/s
V_a	=	600	400	250 V
V_{g2}	=	200	200	175 V
V_{g1}	=	-80	-80	-70 V
I_a	=	2x30	2x30	2x30 mA
I_{g2}	=	6	6	6,5 mA
I_{g1}	=	2x1,0	2x1,2	2x1,8 mA
$V_{g1g1'p}$	=	210	210	210 V
W_{ig1}	=	2x0,1	2x0,11	2x0,17 W
W_{g2}	=	1,2	1,2	1,1 W
W_{ia}	=	2x18	2x12	2x7,5 W
W_a	=	2x4,7	2x3,2	2x2,2 W
W_o	=	26,6	17,6	10,6 W
η	=	74	73	71 %

H.F. class C telegraphy, two systems in push-pull; continued
H.F. classe C télégraphie, deux systèmes en push-pull; continuation
HF Klasse C Telegraphie, zwei Systeme in Gegentakt; Fortsetzung

C.C.S. Operating conditions; continuous service
Caractéristiques d'utilisation; service continu
Betriebsdaten; Dauerbetrieb

f	=	186	186	186 Mc/s
V_a	=	600	400	250 V
V_{g1}	=	-80	-80	-70 V
V_{g2}	=	200	200	175 V
I_a	=	2x30	2x30	2x30 mA
I_{g1}	=	2x1,0	2x1,0	2x1,5 mA
I_{g2}	=	3,0	3,5	4,5 mA
$V_{g1g1'p}$	=	210	210	220 V
W_{ig1}	=	2x0,1	2x0,1	2x0,15 W
W_{g2}	=	0,6	0,7	0,8 W
W_{ia}	=	2x18	2x12	2x7,5 W
W_a	=	2x5,2	2x3,6	2x2,4 W
W_o	=	25,6	16,8	10,2 W
η	=	71[1])	70	68 %

I.C.A.S. Limiting values, intermittent service
Caractéristiques limites, service intermittent
Grenzdaten, aussetzender Betrieb

f	= max.	186 Mc/s	f	= max.	300 Mc/s
V_a	= max.	600 V	V_a	= max.	450 V
W_{ia}	= max.	2x24 W	W_{ia}	= max.	2x12 W
W_a	= max.	2x8 W			
I_a	= max.	2x40 mA			
V_{g2}	= max.	250 V			
W_{g2}	= max.	7 W			
$-V_{g1}$	= max.	200 V			
I_{g1}	= max.	2x5 mA			

1) In order to prevent overheating a low velocity air flow should be directed on the bulb and the base
Afin de prévenir le surchauffage il faut diriger un léger courant d'air sur l'ampoule et le culot
Zur Vermeidung einer Überhitzung ist ein schwacher Lufstrom auf den Kolben und den Sockel notwendig

H.F. class C telegraphy, two systems in push-pull; continued
H.F. classe C télégraphie, deux systèmes en push-pull; continuation
HF Klasse C Telegraphie, zwei Systeme in Gegentakt; Fortsetzung

Operating conditions; intermittent service
I.C.A.S. Caractéristiques d'utilisation; service intermittent
Betriebsdaten; aussetzender Betrieb

f	=	60	60	60 Mc/s
V_a	=	600	400	250 V
V_{g2}	=	200	200	175 V
V_{g1}	=	-80	-80	-70 V
I_a	=	2x40	2x40	2x40 mA
I_{g2}	=	5,5	6,0	7,5 mA
I_{g1}	=	2x1,2	2x2,0	2x2,5 mA
$V_{g1g1'p}$	=	220	220	230 V
W_{ig1}	=	2x0,12	2x0,22	2x0,26 W
W_{g2}	=	1,1	1,2	1,3 W
W_{ia}	=	2x24	2x16	2x10 W
W_a	=	2x6,5	2x4,4	2x3,0 W
W_o	=	35	23,2	14,0 W
η	=	73	72,5	70 %
f	=	186	186	186 Mc/s
V_a	=	600	400	250 V
V_{g2}	=	200	200	175 V
V_{g1}	=	-80	-80	-70 V
I_a	=	2x40	2x40	2x40 mA
I_{g2}	=	4,5	5,0	7,5 mA
I_{g1}	=	2x1,3	2x1,5	2x2,0 mA
$V_{g1g1'p}$	=	220	220	230 V
W_{ig1}	=	2x0,13	2x0,15	2x0,26 W
W_{g2}	=	0,9	1,0	1,3 W
W_{ia}	=	2x24	2x16	2x10 W
W_a	=	2x7,2	2x5	2x3,4 W
W_o	=	33,6	22	13,2 W
η	=	70[1])	69	66 %

[1])See page 4; voir page 4; siehe Seite 4

PHILIPS

H.F. class C anode and screen grid modulation, two systems in push-pull
H.F. classe C modulation d'anode et de grille-écran, deux systèmes en push-pull
HF Klasse C Anoden- und Schirmgittermodulation, zwei Systeme in Gegentakt

Limiting values, continuous service
C.C.S. Caractéristiques limites, service continu
Grenzdaten, Dauerbetrieb

		f = max. 186 Mc/s		f = max. 300 Mc/s	
V_a	= max.	480	V	V_a = max. 360	V
W_{ia}	= max.	2x11,5	W	W_{ia} = max. 2x5,25	W
W_a	= max.	2x4	W		
I_a	= max.	2x25	mA		
V_{g2}	= max.	250	V		
W_{g2}	= max.	4,5	W		
$-V_{g1}$	= max.	200	V		
I_{g1}	= max.	2x5	mA		

Operating conditions, continuous service
C.C.S. Caractéristiques d'utilisation, service continu
Betriebsdaten, Dauerbetrieb

f	=	60	60	186	Mc/s
V_a	=	450	400	250	250 V
R_{g2}	=	18	18	10	10 kΩ
V_{g1}	=	-80	-80	-70	-70 V
I_a	=	2x25	2x25	2x19,5	2x19,5 mA
I_{g2}	=	14	11	11	11 mA
I_{g1}	=	2x1,0	2x0,8	2x1,5	2x1,5 mA
V_{g1_p}	=	83	83	110	110 V
W_{ig1}	=	2x0,08	2x0,06	2x0,15	2x0,15 W
W_{g2}	=	2,8	2,2	1,6	1,6 W
W_{ia}	=	2x11,25	2x10	2x4,9	2x4,9 W
W_a	=	2x2,5	2x2,3	2x1,8	2x1,9 W
W_o	=	17,5	15,4	6,2	6,0 W
η	=	77,5	77	63	61 %
m	=	100	100	100	100 %
W_{mod}	=	11,5	10	5	5 W

H.F. class C anode and screen grid modulation, two systems in push-pull; continued
H.F. classe C modulation d'anode et de grille-écran, deux systèmes en push-pull; continuation
HF Klasse C Anoden- und Schirmgittermodulation, zwei Systeme in Gegentakt; Forsetzung

Limiting values, intermittent service
I.C.A.S. Caractéristiques limites, service intermittent
Grenzdaten, aussetzender Betrieb

f = max.	186 Mc/s	f = max.	300 Mc/s
V_a = max.	480 V	V_a = max.	360 V
W_{ia} = max.	2x15,5 W	W_{ia} = max.	2x7 W
W_a = max.	2x5 W		
I_a = max.	2x32 mA		
V_{g2} = max.	250 V		
W_{g2} = max.	4,5 W		
$-V_{g1}$ = max.	200 V		
I_{g1} = max.	2x5 mA		

Operating conditions, intermittent service
I.C.A.S. Caractéristiques d'utilisation, service intermittent
Betriebsdaten, aussetzender Betrieb

f	=	60	186 Mc/s
V_a	=	250	250 V
R_{g2}	=	10	10 kΩ
V_{g1}	=	-70	-70 V
I_a	=	2x26,5	2x26,5 mA
I_{g2}	=	9	9 mA
I_{g1}	=	2x1,8	2x1,5 mA
V_{g1_p}	=	110	110 V
W_{ig1}	=	2x0,18	2x0,15 W
W_{g2}	=	1,5	1,5 W
W_{ia}	=	2x6,6	2x6,6 W
W_a	=	2x2,5	2x2,7 W
W_o	=	8,2	7,8 W
η	=	62	59 %
m	=	100	100 %
W_{mod}	=	7	7 W

PHILIPS

Class C frequency tripler, two systems in push-pull
Classe C tripleur de fréquence, deux systèmes en push-pull
Klasse C Frequenzverdreifacher, zwei Systeme in Gegentakt

C.C.S. Limiting values, continuous service
Caractéristiques limites, service continu
Grenzdaten, Dauerbetrieb

f	= max.	186 Mc/s	f	= max.	300 Mc/s
V_a	= max.	600 V	V_a	= max.	450 V
W_{ia}	= max.	2x12 W	W_{ia}	= max.	2x9 W
W_a	= max.	2x6 W			
I_a	= max.	2x30 mA			
V_{g2}	= max.	250 V			
W_{g2}	= max.	7 W			
$-V_{g1}$	= max.	200 V			
I_{g1}	= max.	2x5 mA			

C.C.S. Operating conditions, continuous service
Caractéristiques d'utilisation, service continu
Betriebsdaten, Dauerbetrieb

f	=	62/186	62/186 Mc/s
V_a	=	400	250 V
V_{g2}	=	200	200 V
V_{g1}	=	-175	-175 V
I_a	=	2x24	2x30 mA
I_{g2}	=	3	6 mA
I_{g1}	=	2x0,6	2x1,1 mA
$V_{g1g1'p}$	=	430	430 V
W_{ig1}	=	2x0,12	2x0,22 W
W_{g2}	=	0,6	1,2 W
W_{ia}	=	2x9,6	2x7,5 W
W_a	=	2x6	2x5,2 W
W_o	=	7,2	4,6 W
η	=	37,5	31 %

Class C frequency tripler, two systems in push-pull; continued
Classe C tripleur de fréquence, deux systèmes en push-pull; continuation
Klasse C Frequenzverdreifacher, zwei Systeme in Gegentakt; Fortsetzung

I.C.A.S. Limiting values, intermittent service
Caractéristiques limites, service intermittent
Grenzdaten, aussetzender Betrieb

f	= max.	186 Mc/s	f	= max.	300 Mc/s
V_a	= max.	600 V	V_a	= max.	450 V
W_{ia}	= max.	2x16 W	W_{ia}	= max.	2x12 W
W_a	= max.	2x8 W			
I_a	= max.	2x40 mA			
V_{g2}	= max.	250 V			
W_{g2}	= max.	7 W			
$-V_{g1}$	= max.	200 V			
I_{g1}	= max.	2x5 mA			

I.C.A.S. Operating conditions, intermittent service
Caractéristiques d'utilisation, service intermittent
Betriebsdaten, aussetzender Betrieb

f	=	62/186	62/186 Mc/s
V_a	=	400	250 V
V_{g2}	=	200	200 V
V_{g1}	=	-175	-175 V
I_a	=	2x32,5	2x40 mA
I_{g2}	=	4	6,5 mA
I_{g1}	=	2x1,1	2x1,5 mA
$V_{g1g1'p}$	=	430	430 V
W_{ig1}	=	2x0,22	2x0,3 W
W_{g2}	=	0,8	1,3 W
W_{ia}	=	2x13	2x10 W
W_a	=	2x8	2x6,9 W
W_o	=	10	6,2 W
η	=	38,5	31 %

PHILIPS

Class C frequency doubler
Classe C doubleur de fréquence
Klasse C Frequenzverdoppler

Limiting values, per tube
C.C.S. Caractéristiques limites, par tube
Grenzdaten, pro Röhre

f = max. 186 Mc/s		f = max. 300 Mc/s	
V_a = max.	600 V	V_a = max.	450 V
W_{ia} = max.	2x12 W	W_{ia} = max.	2x9 W
W_a = max.	2x6 W		
I_a = max.	2x30 mA		
V_{g2} = max.	250 V		
W_{g2} = max.	7 W		
$-V_{g1}$ = max.	200 V		
I_{g1} = max.	2x5 mA		

Operating conditions, one system, continuous service
C.C.S. Caractéristiques d'utilisation, un système, service continu
Betriebsdaten, ein System, Dauerbetrieb

f	=	93/186	93/186 Mc/s
V_a	=	400	250 V
V_{g1}	=	-175	-175 V
V_{g2}	=	200	200 V
I_a	=	30	30 mA
I_{g1}	=	1,2	1,5 mA
I_{g2}	=	1,5	2 mA
V_{g1_p}	=	210	220 V
W_{ig1}	=	0,23	0,3 W
W_{g2}	=	0,3	0,4 W
W_{ia}	=	12	7,5 W
W_a	=	5,5	3,5 W
W_o	=	6,5	4 W
η	=	54	53 %

Class C frequency doubler
Classe C doubleur de fréquence
Klasse C Frequenzverdoppler

Limiting values, per tube
I.C.A.S. Caractéristiques limites, par tube
Grenzdaten, pro Röhre

f = max. 186 Mc/s		f = max. 300 Mc/s	
V_a = max.	600 V	V_a = max.	450 V
W_{ia} = max.	2x16 W	W_{ia} = max.	2x12 W
W_a = max.	2x8 W		
I_a = max.	2x40 mA		
V_{g2} = max.	250 V		
W_{g2} = max.	7 W		
$-V_{g1}$ = max.	200 V		
I_{g1} = max.	2x5 mA		

Operating conditions, one system, intermittent service
I.C.A.S. Caractéristiques d'utilisation, un système, service intermittent
Betriebsdaten, ein System, aussetzender Betrieb

f =	93/186	93/186 Mc/s
V_a =	400	250 V
V_{g2} =	200	200 V
V_{g1} =	-175	-175 V
I_a =	40	40 mA
I_{g2} =	2,5	3 mA
I_{g1} =	1,5	2 mA
V_{g1_p} =	220	230 V
W_{ig1} =	0,3	0,42 W
W_{g2} =	0,5	0,6 W
W_{ia} =	16	10 W
W_a =	8	5,1 W
W_o =	8	4,9 W
η =	50	49 %

L.F. class B amplifier and modulator, two systems in push-pull
Amplificatrice et modulatrice B.F. classe B, deux systèmes en push-pull
NF-Verstärker und Modulator Klasse B, zwei Systeme in Gegentakt

---

C.C.S. Limiting values, continuous service
Caractéristiques limites, service continu
Grenzdaten, Dauerbetrieb

V_a	= max.	600	V
W_{ia}	= max.	2x18	W
W_a	= max.	2x6	W
I_a	= max.	2x30	mA
V_{g2}	= max.	250	V
W_{g2}	= max.	7	W
$-V_{g1}$	= max.	200	V

C.C.S. Operating conditions, continuous service
Caractéristiques d'utilisation, service continu
Betriebsdaten, Dauerbetrieb

V_f	=	6,3[1])		6,3[1])		V
V_a	=	450		400		V
V_{g2}	=	200		200		V
V_{g1}	=	-24		-24		V
$R_{aa'}$	=	20		16		kΩ
$V_{g1g1'p}$	=	0	94	0	94	V
I_a	=	2x2,8	2x32,5	2x2,7	2x35	mA
I_{g2}	=	2x0,16	2x5	2x0,15	2x5,3	mA
I_{g1}	=	0	2x1,1	0	2x1,3	mA
W_{ia}	=	2x1,3	2x14,6	2x1,1	2x14	W
W_a	=	2x1,3	2x5,6	2x1,1	2x5,5	W
W_o	=	-	18	-	17	W
d_{tot}	=	-	5	-	5	%
η	=	-	61,5	-	60,5	%

---

[1]) D.C. voltage
Tension directe
Gleichspannung

L.F. class B amplifier and modulator, two systems in push-pull; continued
Amplificatrice et modulatrice B.F. classe B, deux systèmes en push-pull; continuation
NF-Verstärker und Modulator Klasse B, zwei Systeme in Gegentakt; Fortsetzung

C.C.S. Operating conditions, continuous service
Caractéristiques d'utilisation, service continu
Betriebsdaten, Dauerbetrieb

V_f	=	6,3[1]		6,3[1]		V
V_a	=	350		250		V
V_{g2}	=	200		175		V
V_{g1}	=	-24		-20		V
R_{aa}	=	12		8		kΩ
$V_{g1g1'p}$	=	0	104	0	100	V
I_a	=	2x2,5	2x37,5	2x2,9	2x36	mA
I_{g2}	=	2x0,14	2x5,5	2x0,2	2x5	mA
I_{g1}	=	0	2x1,4	0	2x1,5	mA
W_{ia}	=	2x0,88	2x13,1	2x0,71	2x9	W
W_a	=	2x0,88	2x5,1	2x0,71	2x4,5	W
W_o	=	-	16	-	9	W
dtot	=	-	5	-	5	%
η	=	-	61	-	50	%

[1]) Direct voltage
Tension directe
Gleichspannung

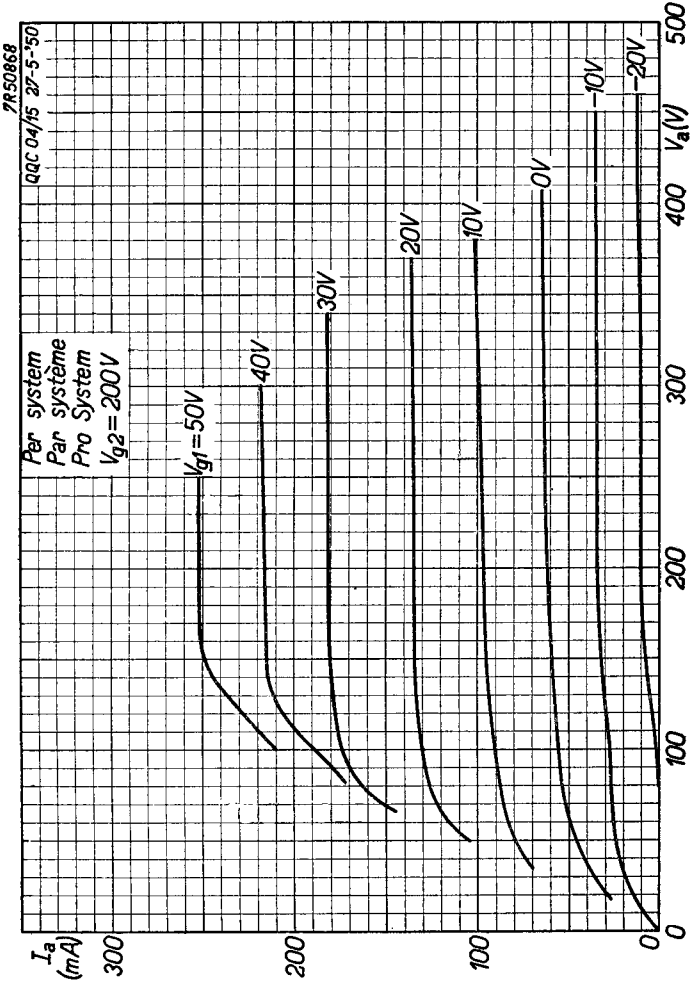
L.F. class B amplifier and modulator, two systems in push-pull; continued
Amplificatrice et modulatrice B.F. classe B, deux systèmes en push-pull; continuation
NF-Verstärker und Modulator Klasse B, zwei Systeme in Gegentakt; Fortsetzung

Limiting values, intermittent service
I.C.A.S. Caractéristiques limites, service intermittent
Grenzdaten, aussetzender Betrieb

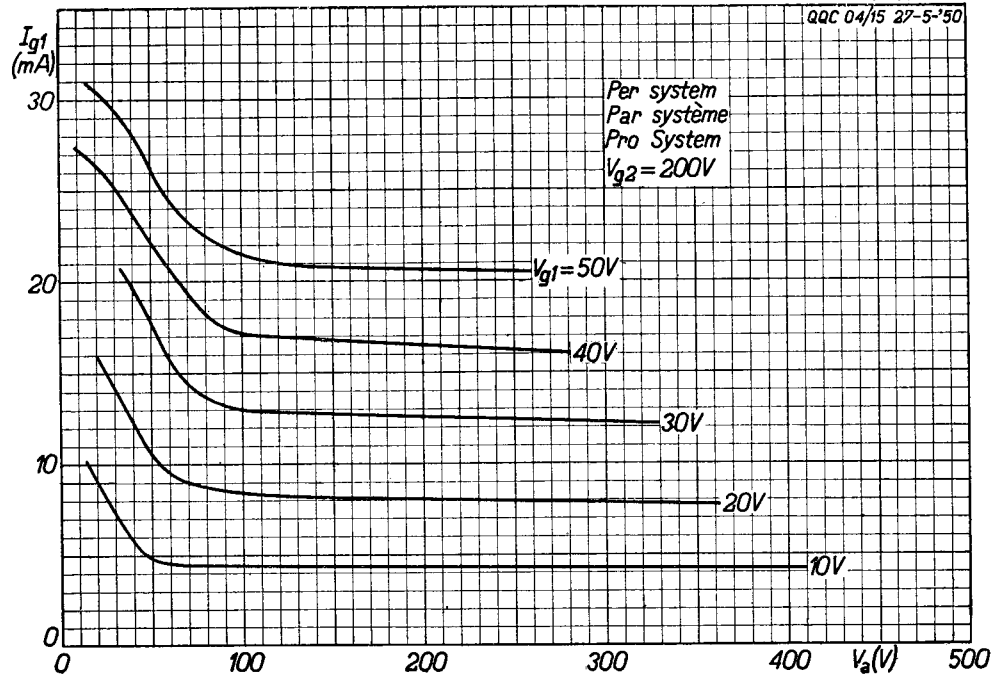
V_a	= max.	600	V
W_{ia}	= max.	2x24	W
W_a	= max.	2x8	W
I_a	= max.	2x40	mA
V_{g2}	= max.	250	V
W_{g2}	= max.	7	W
$-V_{g1}$	= max.	200	V

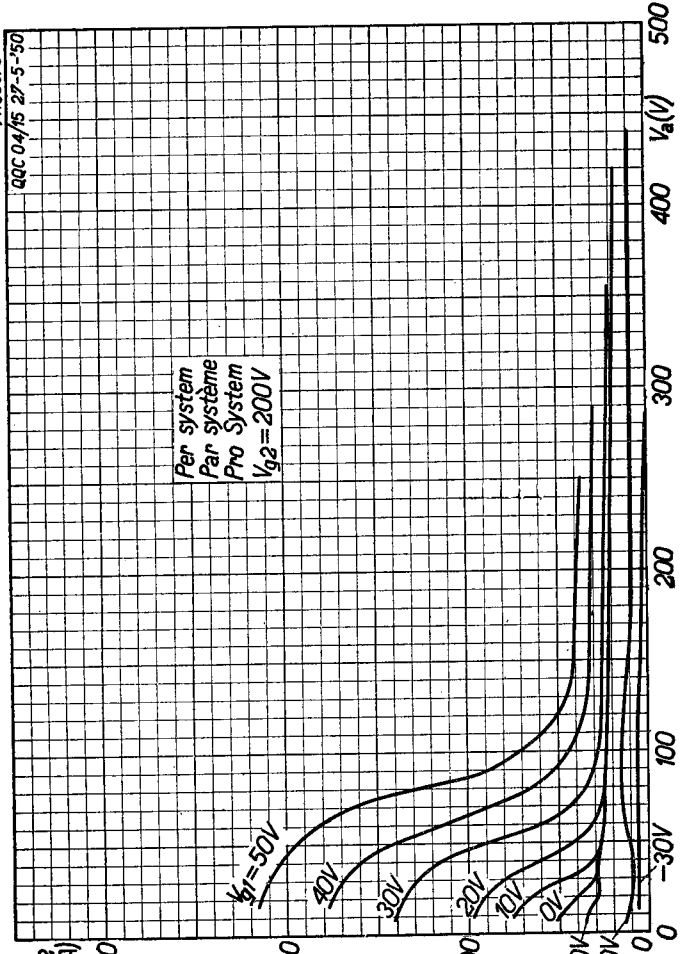
Operating conditions, intermittent service
I.C.A.S. Caractéristiques d'utilisation, service intermittent
Betriebsdaten, aussetzender Betrieb

V_f	=	6,3[1])		V
V_a	=	600		V
V_{g2}	=	200		V
V_{g1}	=	-24		V
$R_{aa'}$	=	25		kΩ
$V_{g1g1'p}$	=	0	85	V
I_a	=	2x3,0	2x33,5	mA
I_{g2}	=	2x0,18	2x4,5	mA
I_{g1}	=	0	2x1,2	mA
W_{ia}	=	2x1,8	2x20,1	W
W_a	=	2x1,8	2x6	W
W_o	=	0	28,2	W
d_{tot}	=	-	5	%
η	=	0	70	%


7R50868
QQC 04/15 27-5-'50
Per system
Par système
Pro System
V_{g2} = 200 V
V_{g1} = 50V
40V
30V
20V
10V
0V
-10V
-20V
I_a (mA)
300
200
100
0
0
100
200
300
400
500
V_a (V)

7R50869
QQC 04/15 27-5-'50




7R5D870
QQC 04/15 27-5-'50
Per system
Par système
Pro System
V_{g2}=200V
V_{g1}=-50V
-40V
-30V
-20V
-10V
0V
-10V
-20V
-30V
I_{g2} (mA)
300
200
100
0
0
100
200
300
400
500
V_a(V)

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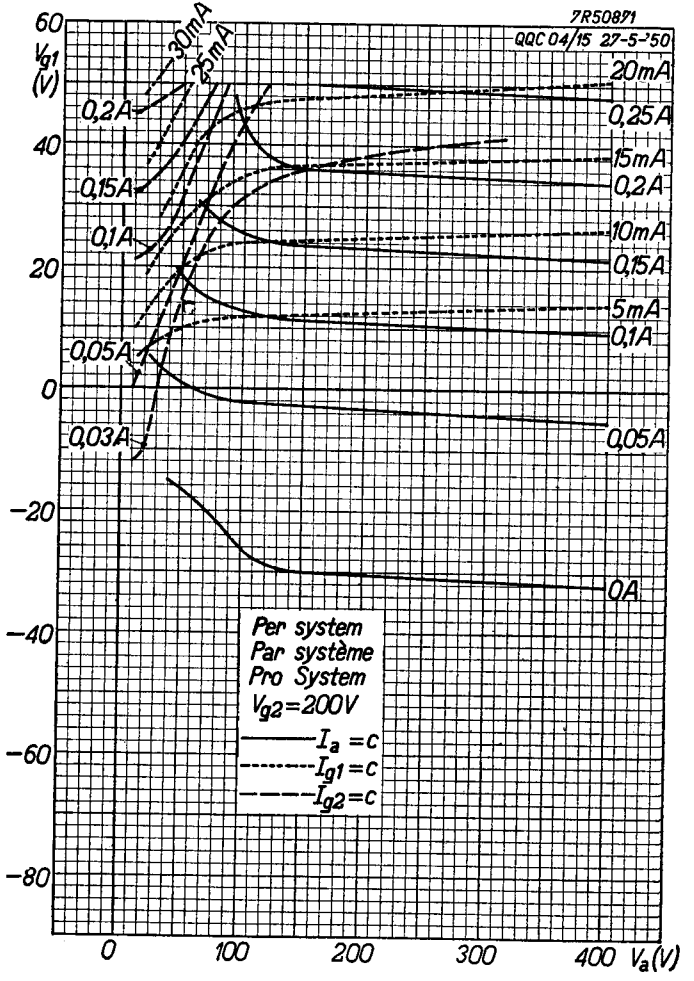
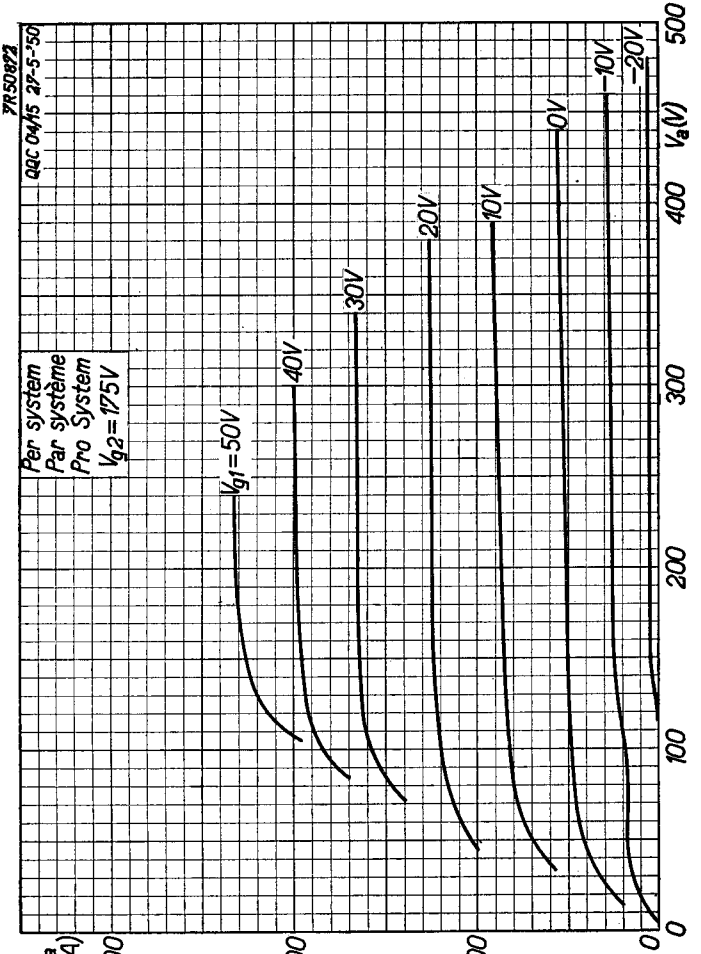
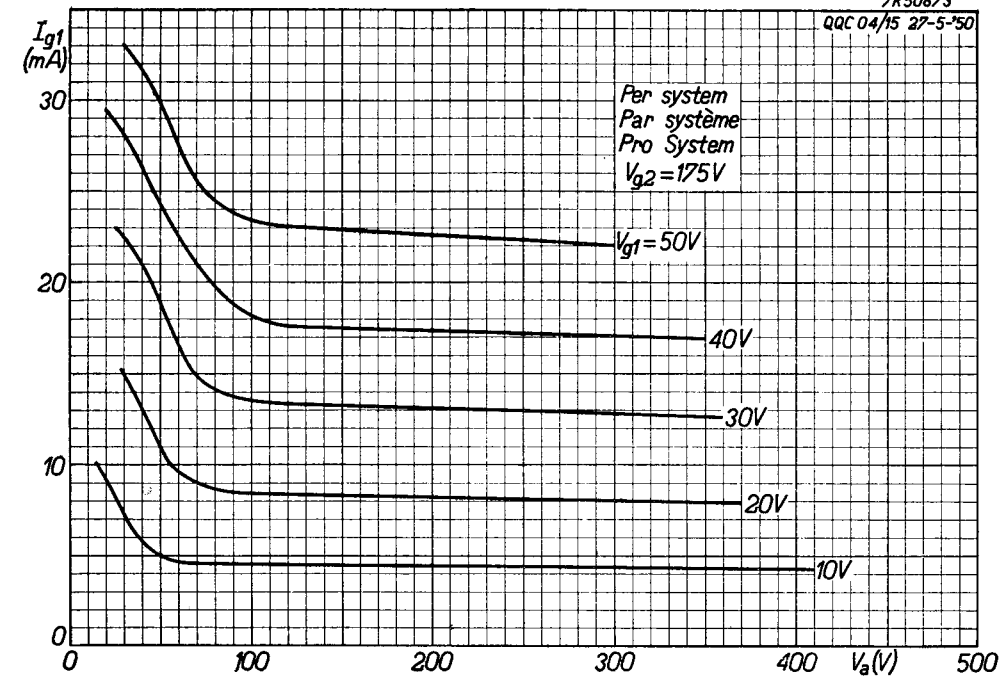

7R50871
QQC 04/15 27-5-50
60
V_{g1} (V)
40
20
0
−20
−40
−60
−80
0
100
200
300
400
V_a(V)
30mA
25mA
20mA
0,25A
15mA
0,2A
0,2A
10mA
0,15A
0,15A
5mA
0,1A
0,1A
0,05A
0,05A
0,03A
0A
Per system
Par système
Pro System
V_{g2}=200V
I_a =c
I_{g1}=c
I_{g2}=c


7R5082A
QQC 04/15 27-5-'50
Per system
Par système
Pro System
V_{g2}=175V
V_{g1}=50V
40V
30V
20V
10V
0V
-10V
-20V
I_a (mA)
300
200
100
0
0
100
200
300
400
500
V_a(V)


7R50873
QQC 04/15 27-5-'50
I_{g1} (mA)
30
20
10
0
Per system
Par système
Pro System
V_{g2} = 175V
V_{g1} = 50V
40V
30V
20V
10V
0
100
200
300
400
V_a(V)
500

F

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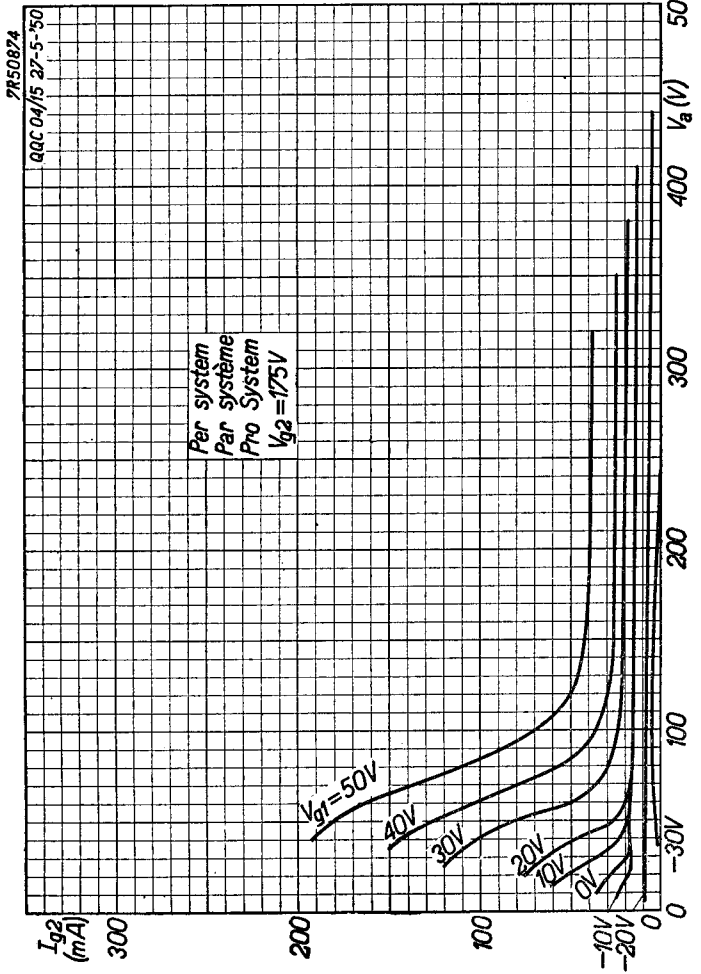
QQC 04/15



7.7.1954

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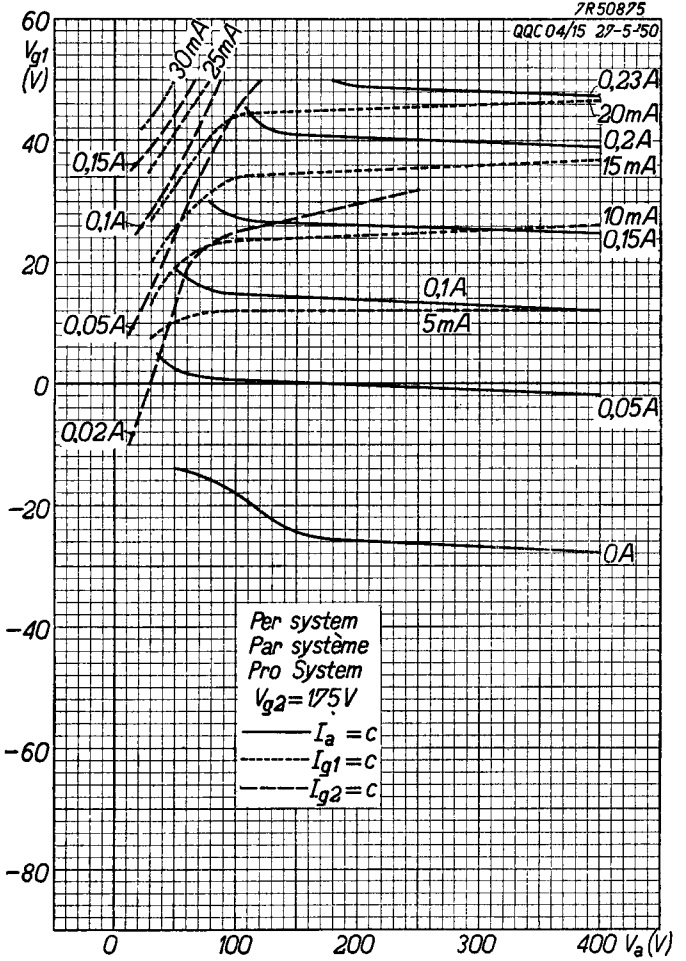

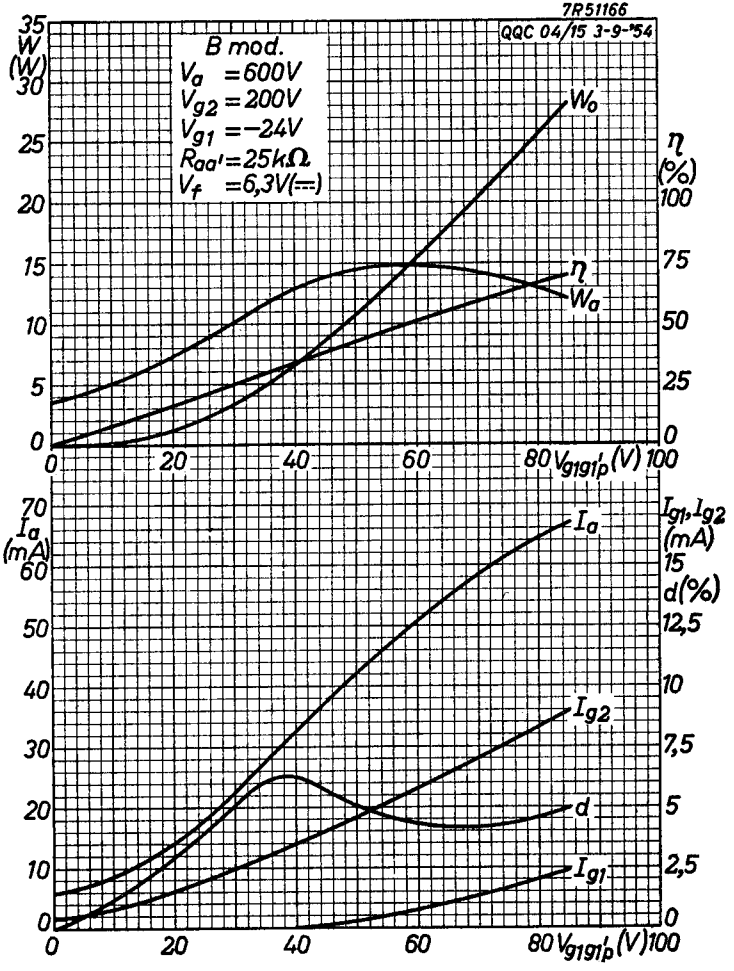
7R51166
QQC 04/15 3-9-'54
B mod.
V_a = 600V
V_{g2} = 200V
V_{g1} = −24V
$R_{aa'}$ = 25kΩ
V_f = 6,3V(=)
W (W)
η (%)
W_o
η
W_a
$V_{g1g1'p}$ (V)
I_a (mA)
I_{g1}, I_{g2} (mA)
d (%)
I_a
I_{g2}
d
I_{g1}
$V_{g1g1'p}$ (V)

QQC 04/15

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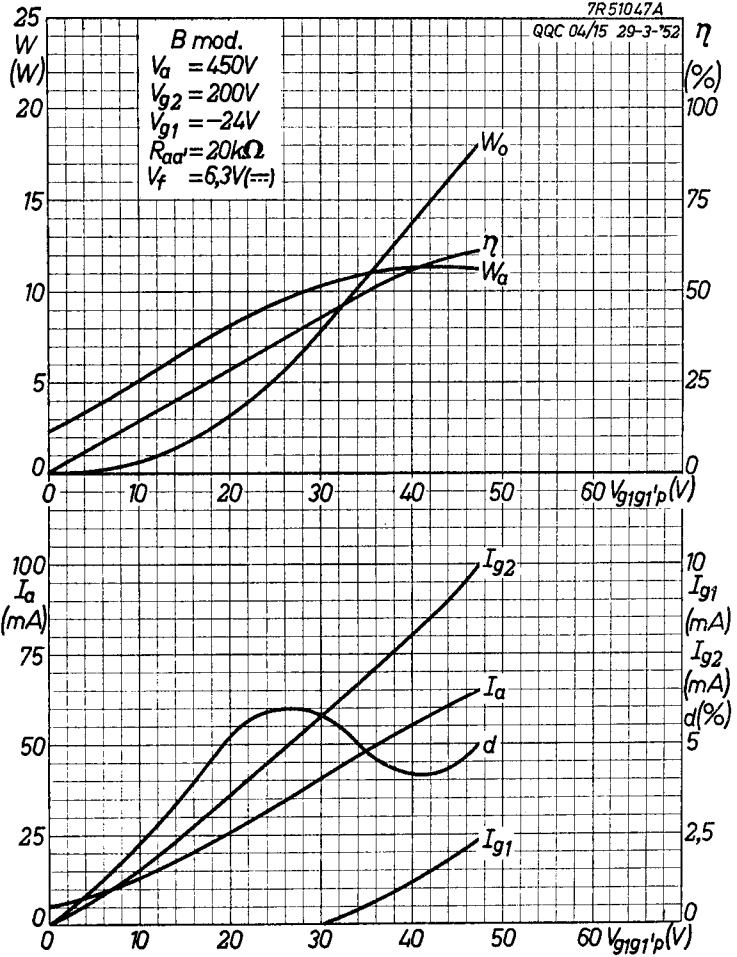
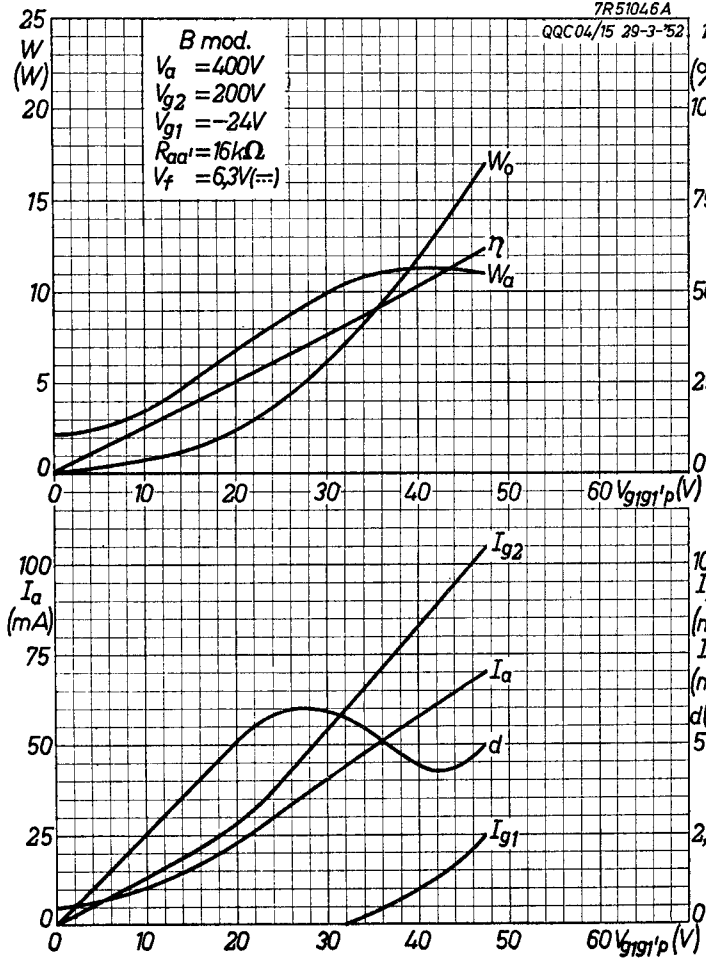


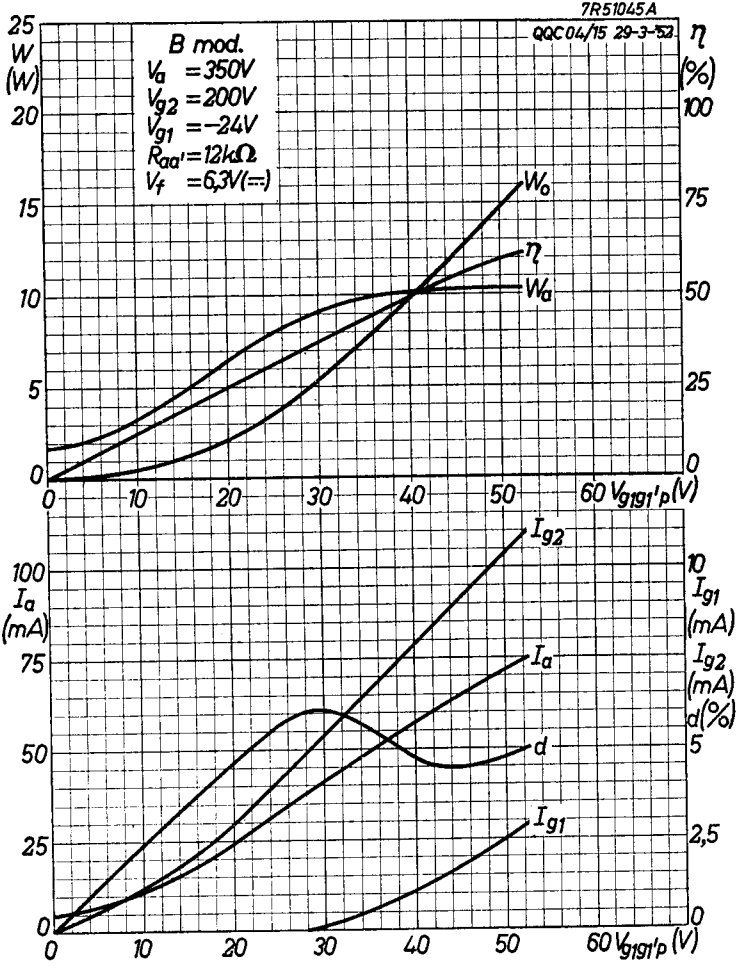
J


7R51046A
QQC04/15 29-3-'52
B mod.
V_a =400V
V_{g2} =200V
V_{g1} =−24V
$R_{aa'}$=16kΩ
V_f =6,3V(≂)
W (W)
η (%)
W_o
η
W_a
$V_{g1g1'p}$ (V)
I_a (mA)
I_{g2}
I_a
d
I_{g1}
I_{g1} (mA)
I_{g2} (mA)
d(%)

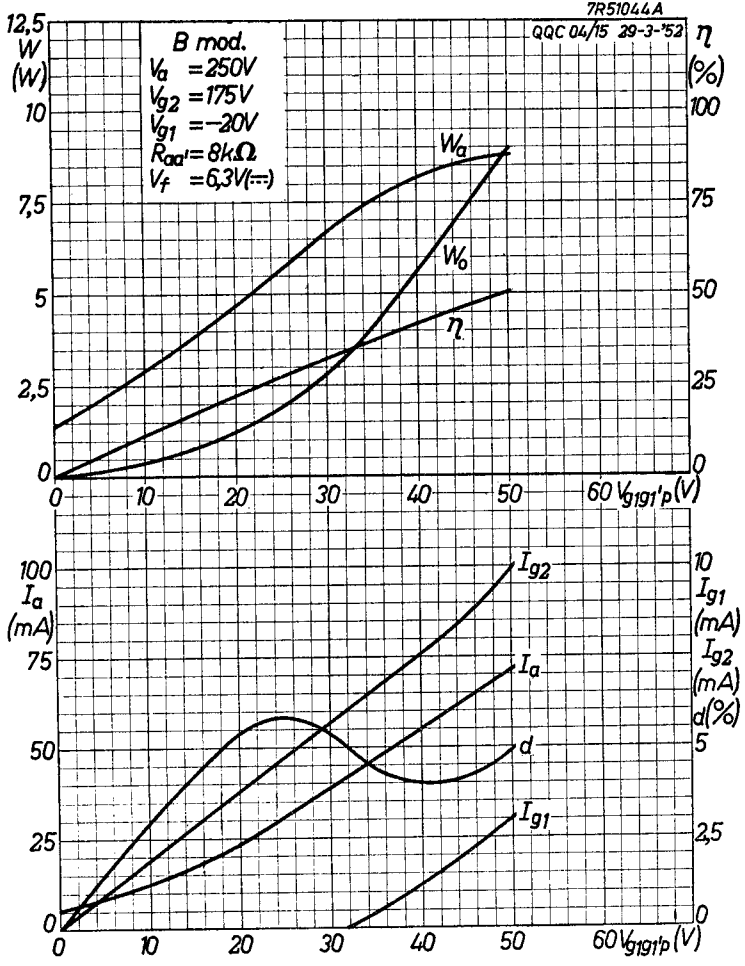
7. 7. 1954

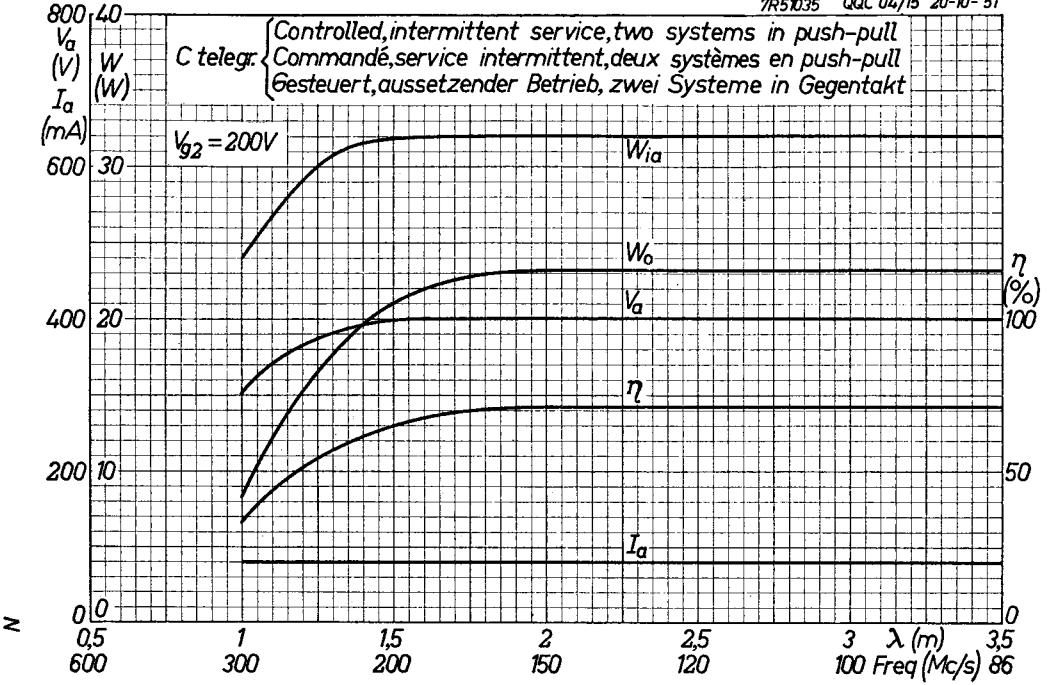
K

PHILIPS


7R51045A
QQC04/15 29-3-52
B mod.
V_a =350V
V_{g2} =200V
V_{g1} =−24V
$R_{aa'}$=12kΩ
V_f =6,3V(=)
W (W)
η (%)
W_o
η
W_a
$V_{g1g1'p}$ (V)
I_a (mA)
I_{g2}
I_{g1} (mA)
I_{g2} (mA)
d (%)
I_a
d
I_{g1}

L


7R51044A
QQC 04/15 29-3-'52
B mod.
V_a = 250V
V_{g2} = 175V
V_{g1} = −20V
$R_{aa'}$ = 8kΩ
V_f = 6,3V(=)
12,5 W (W)
10
7,5
5
2,5
0
η (%)
100
75
50
25
0
W_a
W_o
η
0 10 20 30 40 50 60 $V_{g1g1'p}$ (V)
100 I_a (mA)
75
50
25
0
10 I_{g1} (mA)
I_{g2} (mA)
d (%)
5
2,5
0
I_{g2}
I_a
d
I_{g1}
0 10 20 30 40 50 60 $V_{g1g1'p}$ (V)


C telegr. {Controlled, intermittent service, two systems in push-pull
Commandé, service intermittent, deux systèmes en push-pull
Gesteuert, aussetzender Betrieb, zwei Systeme in Gegentakt
$V_{g2} = 200V$
W_{ia}
W_o
V_a
η
I_a
V_a (V)
I_a (mA)
W (W)
η (%)
800
600
400
200
0
40
30
20
10
0
100
50
0
0,5
1
1,5
2
2,5
3
3,5
λ (m)
600
300
200
150
120
100
Freq (Mc/s)
86
N

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Electronic Tube

HANDBOOK

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29, 30	FP	1999.10.31