

PENTODE for use as line time base output tube
 PENTHODE pour utilisation comme tube de sortie de base
 de temps lignes
 PENTODE zur Verwendung als Zeilenzeitbasisendröhre

Heating : indirect by A.C. or D.C.
 series supply

Chauffage: indirect par C.A. ou C.C.
 alimentation- série

Heizung : indirekt durch Wechsel-
 oder Gleichstrom; Serien-
 speisung

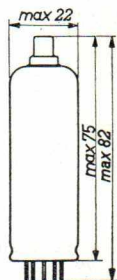
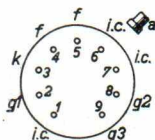
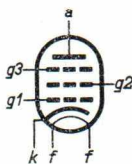
$I_f = 300 \text{ mA}$

$V_f = 21,5 \text{ V}$

Dimensions in mm

Dimensions en mm

Abmessungen in mm



Base, culot, Sockel: NOVAL

Capacitances

Capacités

Kapazitäten

$C_{g1} = 14,7 \text{ pF}$

$C_a = 6,4 \text{ pF}$

$C_{ag1} < 0,8 \text{ pF}$

$C_{ak} < 0,1 \text{ pF}$

$C_{g1f} < 0,2 \text{ pF}$

Typical characteristics

Caractéristiques types

Kenndaten

$V_a = 170 \quad 200 \text{ V}$

$V_{g3} = 0 \quad 0 \text{ V}$

$V_{g2} = 170 \quad 200 \text{ V}$

$V_{g1} = -22 \quad -28 \text{ V}$

$I_a = 45 \quad 40 \text{ mA}$

$I_{g2} = 3,0 \quad 2,8 \text{ mA}$

$S = 6,2 \quad 6,0 \text{ mA/V}$

$R_i = 10 \quad 11 \text{ k}\Omega$

$\mu_{g2g1} = 5,3 \quad 5,3$

Optimum peak anode current in line output application

To allow for tube spread and for deterioration during life, the circuit should be designed around a peak anode current not exceeding

250 mA at $V_a = 70$ V, $V_{g2} = 170$ V

310 mA at $V_a = 70$ V, $V_{g2} = 200$ V

The peak anode current of an average new tube is:

350 mA at $V_a = 70$ V, $V_{g2} = 170$ V, $V_{g1} = -1$ V

420 mA at $V_a = 70$ V, $V_{g2} = 200$ V, $V_{g1} = -1$ V

Courant anodique de crête optimum en application tube final de base de temps lignes

Pour tenir compte des tolérances du tube et de la détérioration pendant la durée, le circuit sera dessiné pour un courant anodique de crête ne dépassant pas une valeur de

250 mA à $V_a = 70$ V, $V_{g2} = 170$ V

310 mA à $V_a = 70$ V, $V_{g2} = 200$ V

Le courant anodique de crête d'un tube nouveau moyen est de

350 mA à $V_a = 70$ V, $V_{g2} = 170$ V, $V_{g1} = -1$ V

420 mA à $V_a = 70$ V, $V_{g2} = 200$ V, $V_{g1} = -1$ V

Höchstwert des Anodenspitzenstromes beim Gebrauch als Endröhre für die horizontale Ablenkung

Um den Röhrentoleranzen und der Verschlechterung der Röhre während der Lebensdauer Rechnung zu tragen, soll die Schaltung entworfen werden für einen Höchstwert des Anodenspitzenstromes von

250 mA bei $V_a = 70$ V, $V_{g2} = 170$ V

310 mA bei $V_a = 70$ V, $V_{g2} = 200$ V

Der Anodenspitzenstrom einer durchschnittlichen neuen Röhre ist

350 mA bei $V_a = 70$ V, $V_{g2} = 170$ V, $V_{g1} = -1$ V

420 mA bei $V_a = 70$ V, $V_{g2} = 200$ V, $V_{g1} = -1$ V

Operating characteristics of two valves as class B push-pull amplifier

Caractéristiques d'utilisation de deux tubes en amplificatrice push-pull classe B

Betriebsdaten für zwei Röhren in Klasse B Gegentakt-schaltung

V_a	=	170		200		V
V_{g3}	=	0		0		V
V_{bg2}	=	170		200		V
$R_{g2}^{1)}$	=	1		1		k Ω
V_{g1}	=	-27		-31,5		V
R_{aa}	=	2,5		2,5		k Ω
V_i	=	0	19	0	22,5	V_{eff}
I_a	=	2x20	2x73	2x25	2x87	mA
I_{g2}	=	2x1,5	2x10	2x2,0	2x12,5	mA
W_o	=	0	13,5	0	20	W
$dtot$	=	-	5,2	-	5,2	%

Limiting values

Caractéristiques limites

Grenzdaten

V_{a_o}	= max. 550 V	V_{g2_o}	= max. 550 V
V_{ap}	= max. +7 kV ²⁾	V_{g2}	= max. 250 V
$-V_{ap}$	= max. 7 kV ²⁾	I_k	= max. 180 mA
V_a	= max. 250 V	V_{g1} ($I_{g1}=+0,3\mu A$)	= max. -1,3 V
W_a	= max. 8 W	R_{g1}	= max. 0,5 M Ω
W_{g2}	= max. 4,5 W ³⁾	R_{kf}	= max. 20 k Ω
W_a+W_{g2}	= max. 10 W	V_{kf}	= max. 200 V

1) Common screen grid resistor

Résistance de grille écran commune

Gemeinsamer Schirmgitterwiderstand

2) Maximum pulse duration 18% of a cycle, with a maximum of 18 μ sec.

Durée de l'impulsion max. 18% d'un cycle, avec un maximum de 18 μ sec.

Impulszeit max. 18% einer Periode, mit einem Maximum von 18 μ sec.

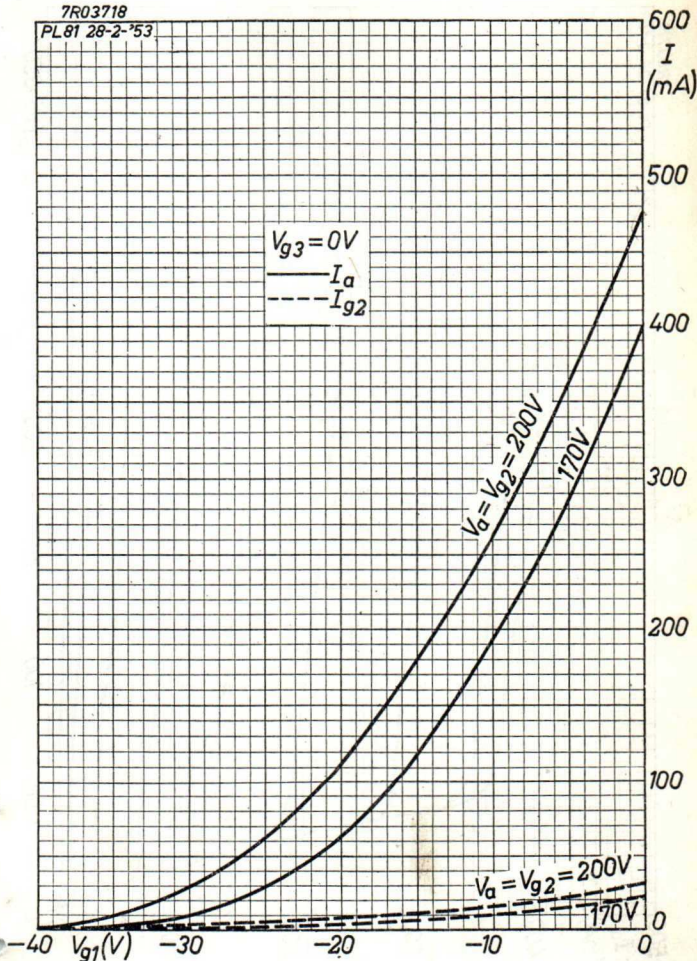
3) During the heating-up of the cathode)

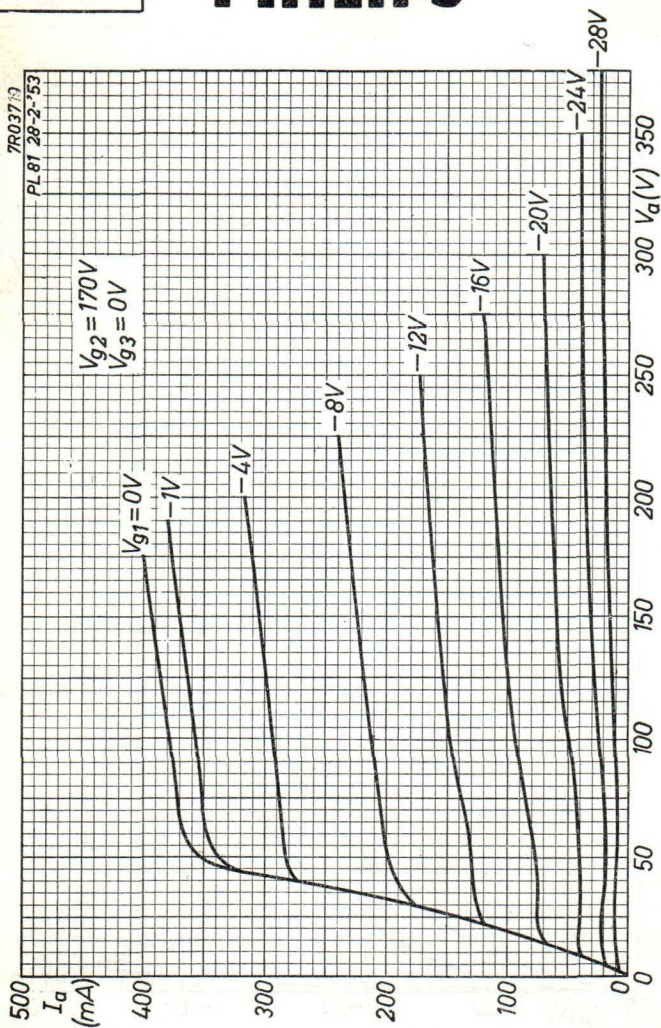
Pendant l'échauffement de la cathode) W_{g2p} = max. 6 W

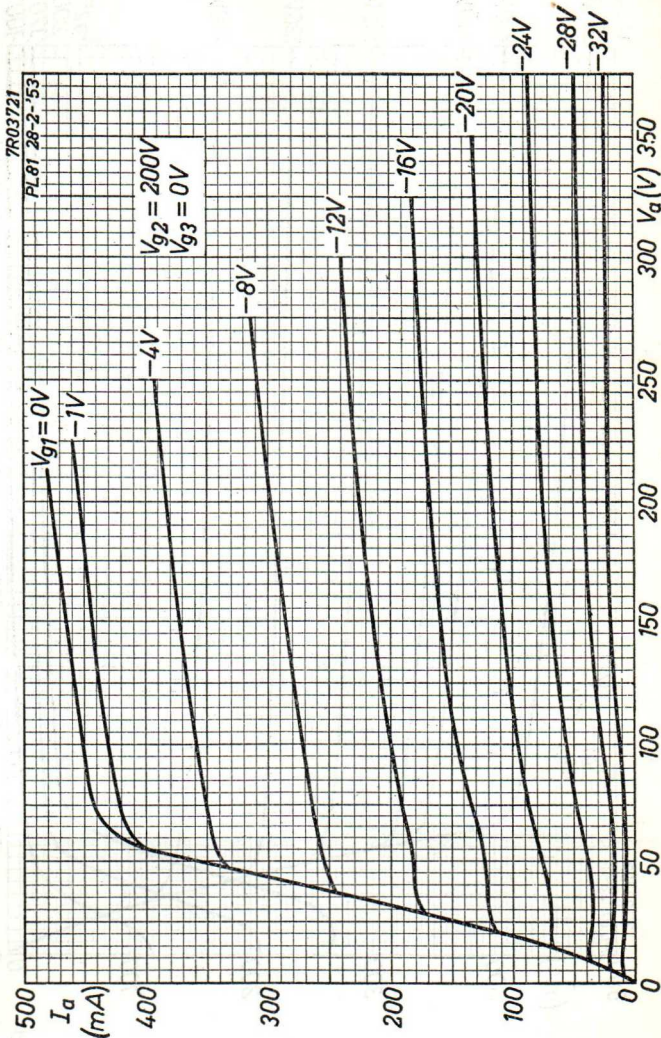
Während der Anheizzeit der Kathode)

7R03718

PL81 28-2-53

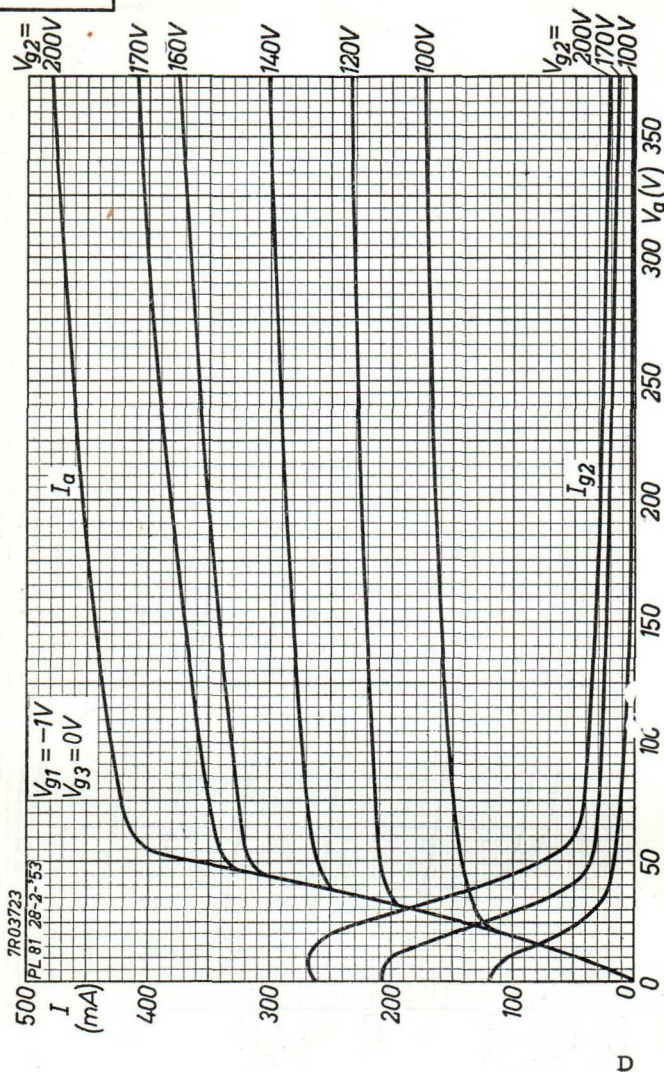


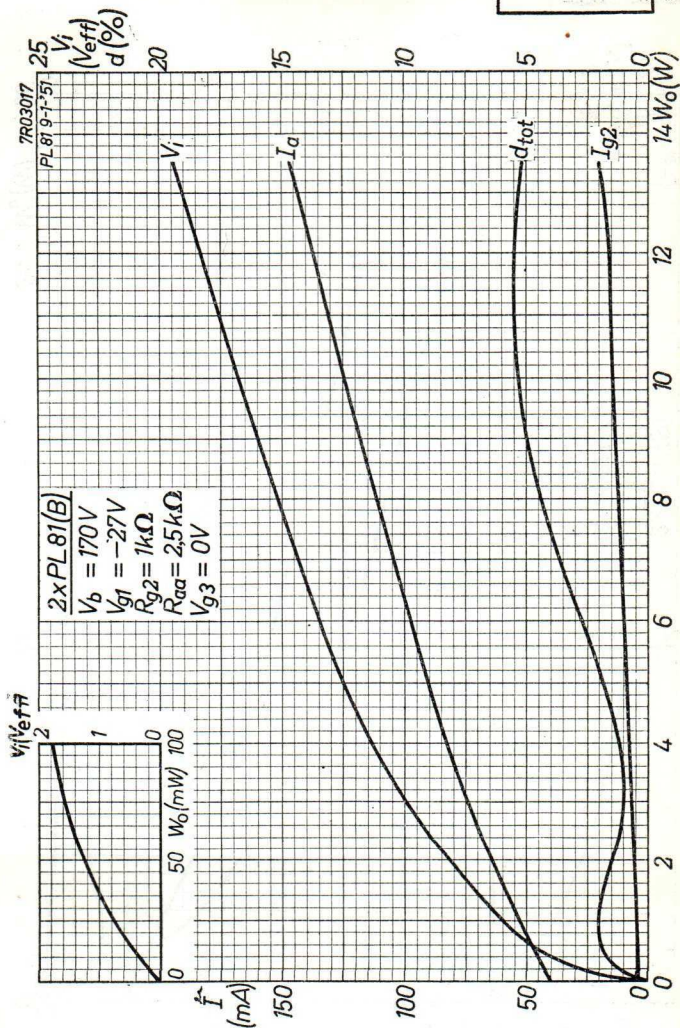




PL 81

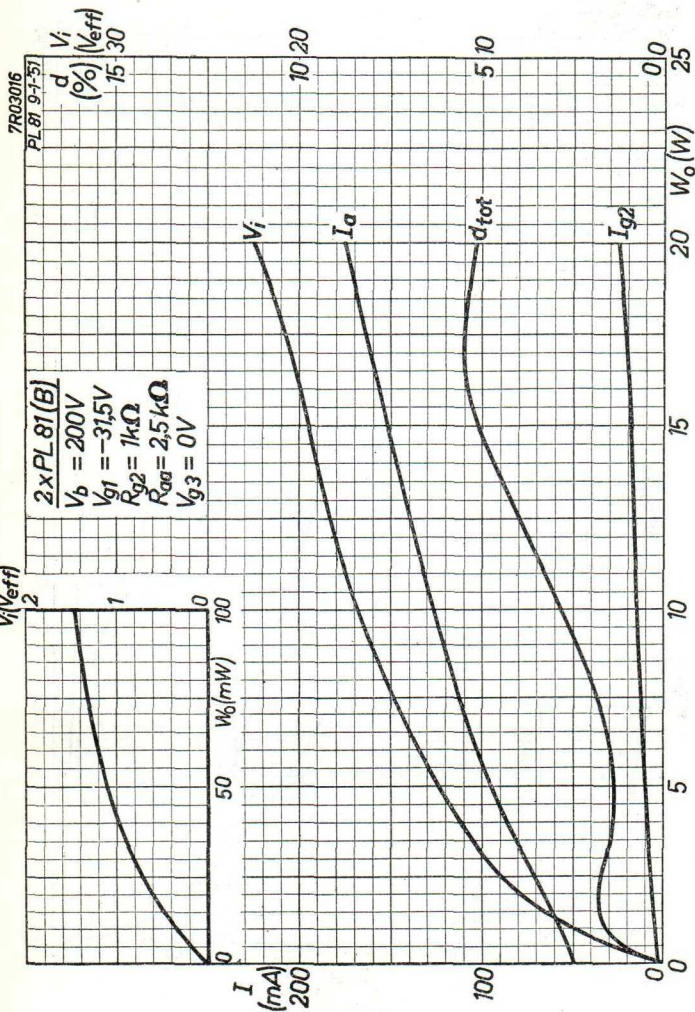
PHILIPS





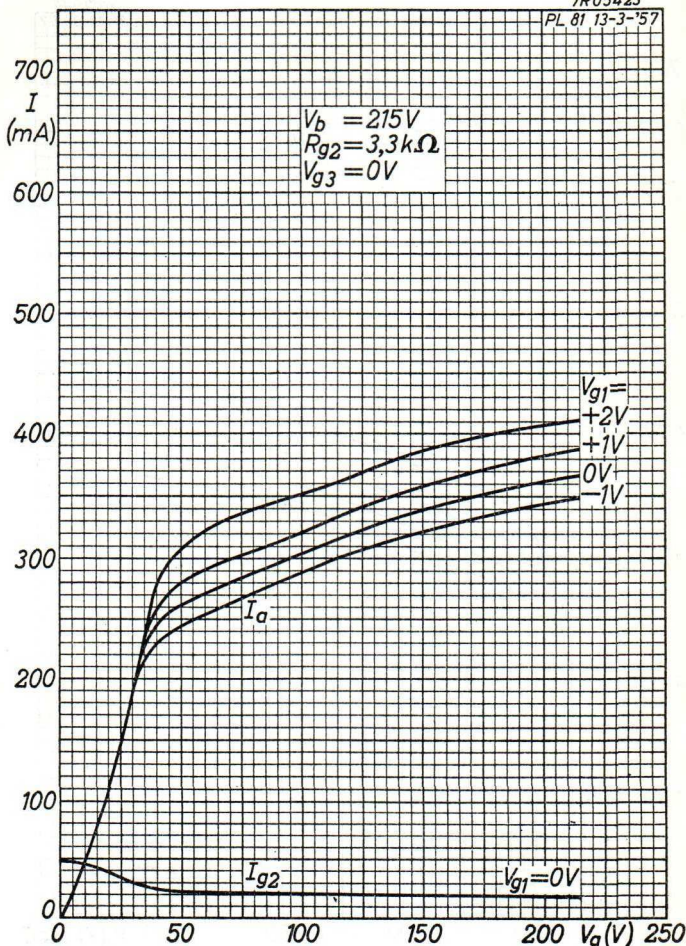
PL 81

PHILIPS



7R05423

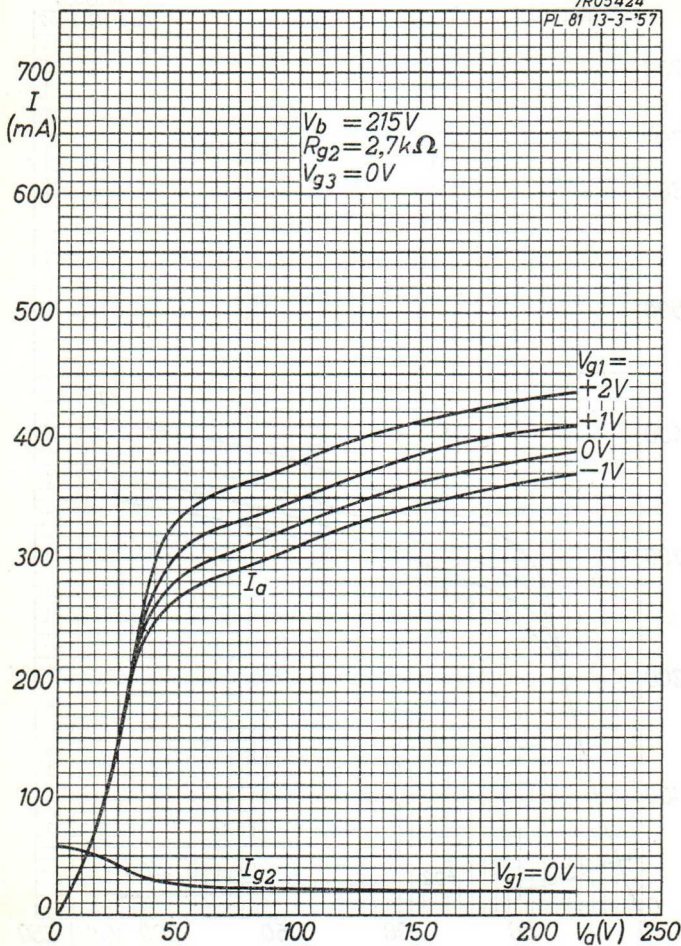
PL 81 13-3-57



PL 81**PHILIPS**

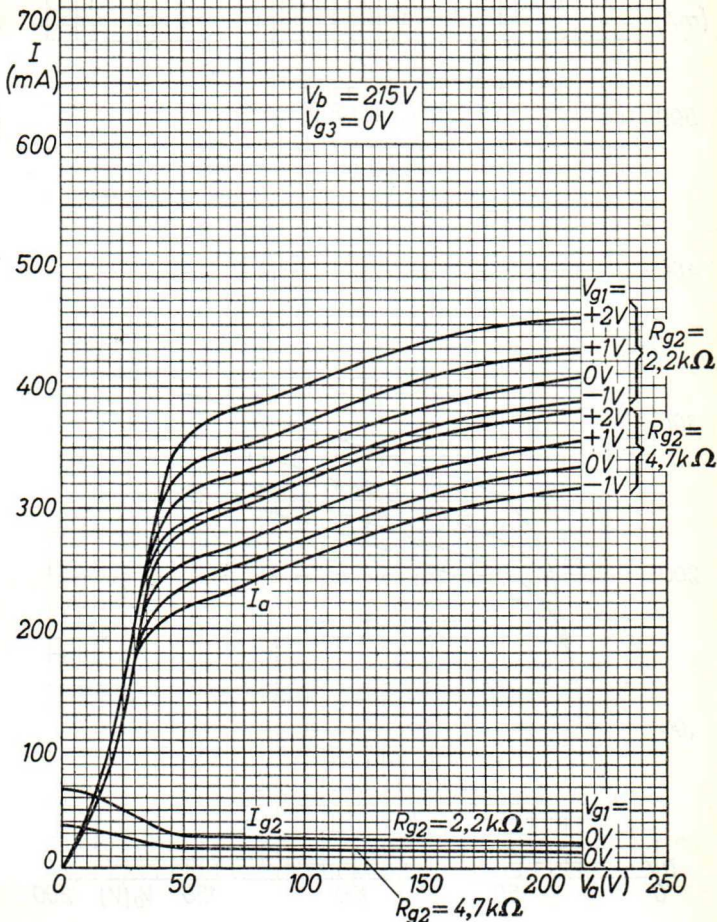
7R05424

PL 81 13-3-57



7R05425

PL 81 13-3-'57



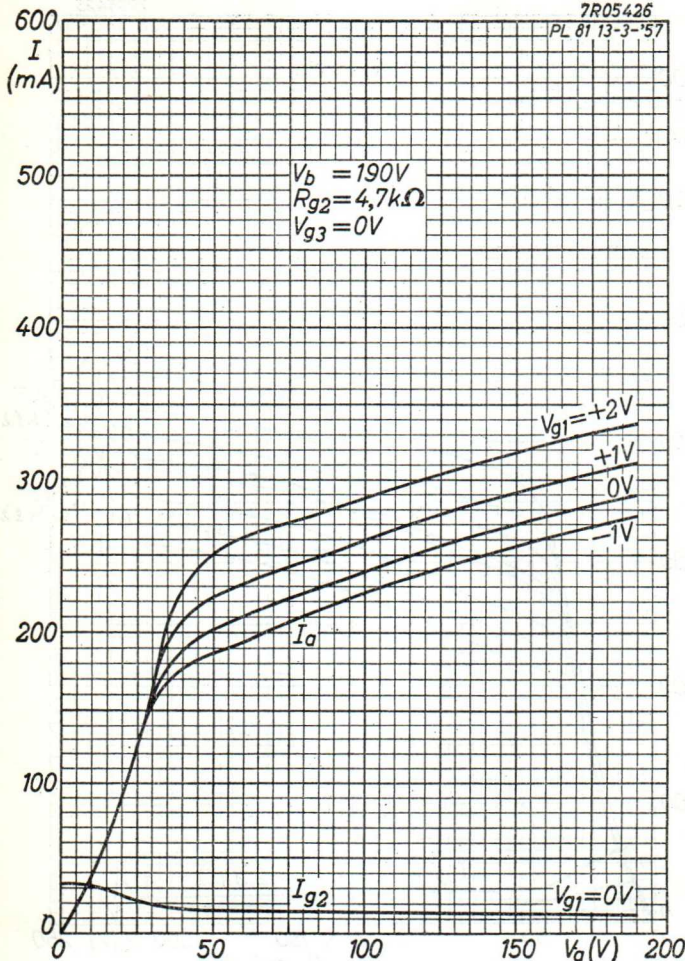
3.3.1957

I

PL 81**PHILIPS**

7R05426

PL 81 13-3-'57

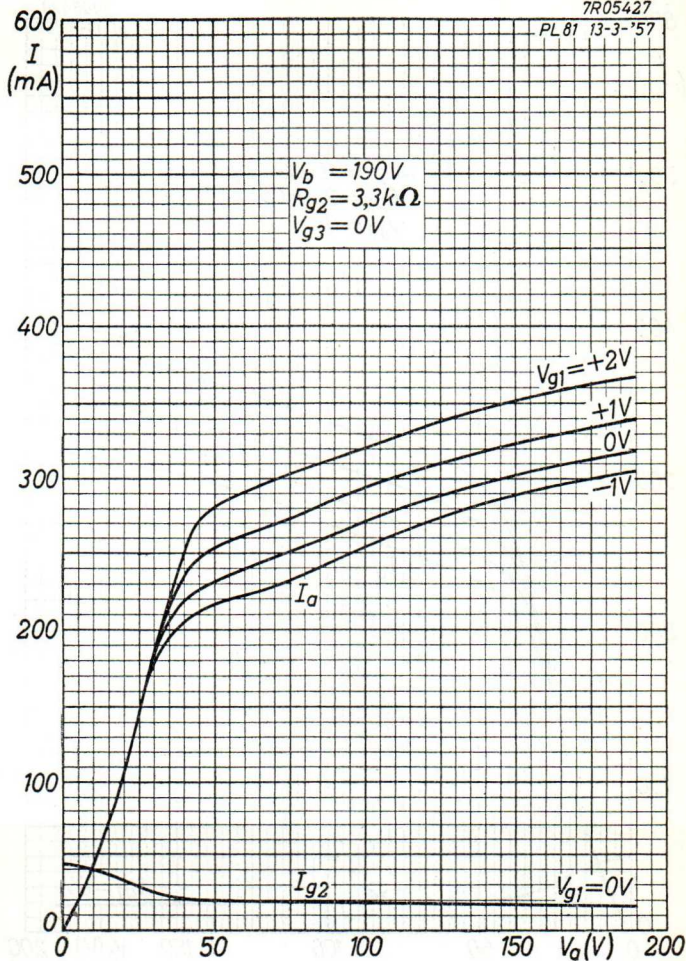


PHILIPS

PL 81

7R05427

PL 81 13-3-'57



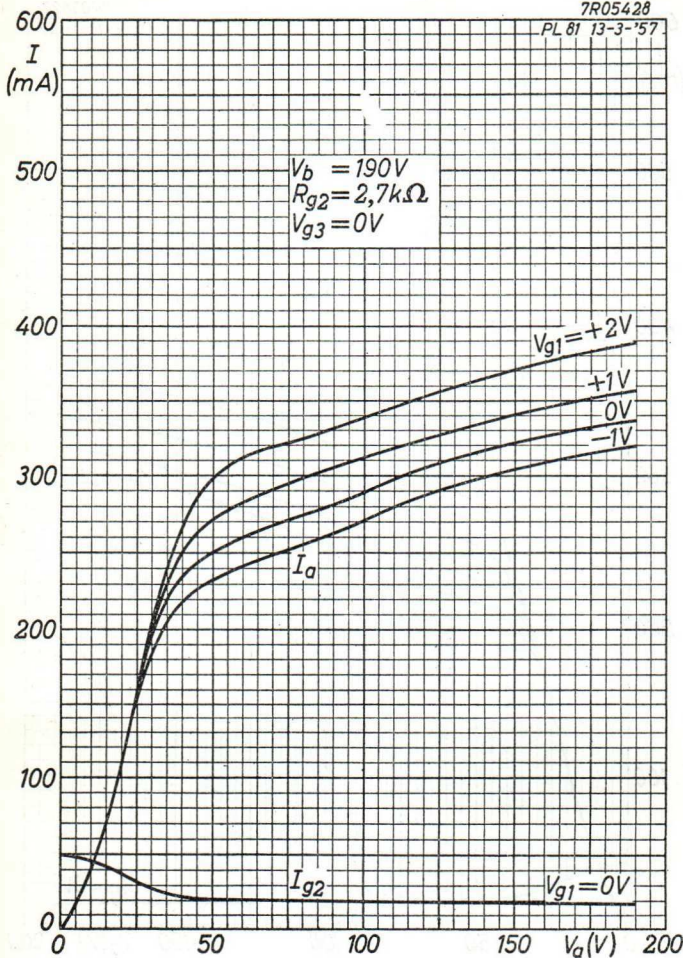
3.3.1957

K

PL 81**PHILIPS**

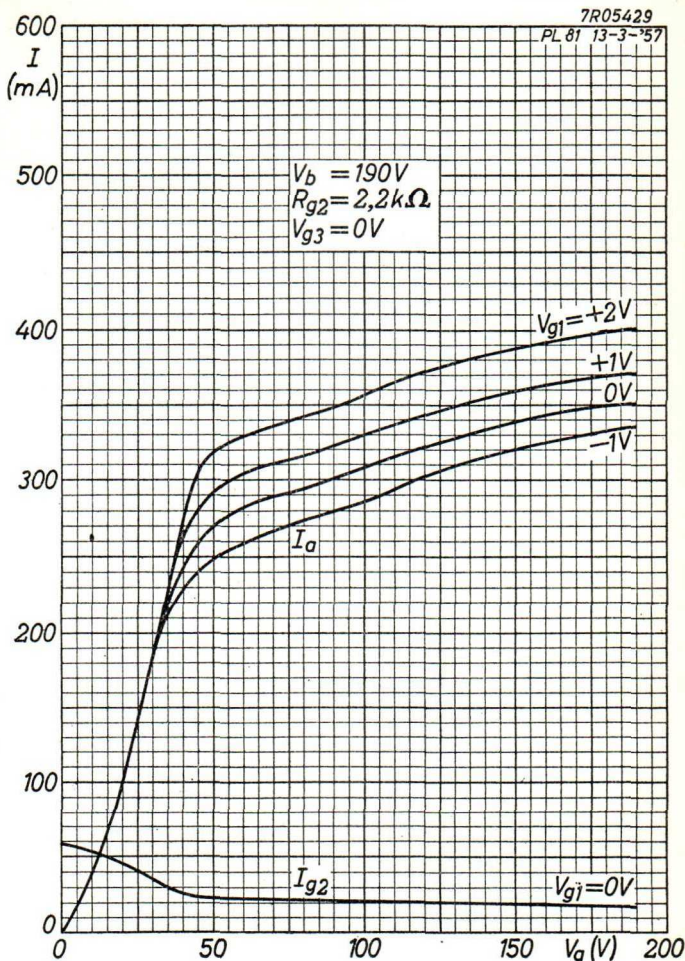
7R05428

PL 81 13-3-'57



PHILIPS

PL 81



3.3.1957

M

