

Netzröhre für GW-Heizung  
Indirekt geheizt  
Serienpeisung  
DC-AC-Heating  
Indirectly heated  
connected series

PFL 200

# TELEFUNKEN

Pentode/Endpentode  
Power pentode

## Vorläufige technische Daten · Tentative data

**Pentode für getastete Schwundregelung, Impulsabtrennstufen,  
Ton-ZF-Verstärker. Endpentode für Video-Endstufen.**  
Pentode for gated AGC, pulse separators, audio IF amplifiers.  
Power pentode for video power stages.

U <sub>f</sub>	ca. 17	V
I <sub>f</sub>	<b>300</b>	mA

Normierte Anheizzeit · Normalize heating-up time

## Meßwerte · Measuring values

### Pentode (System: F)

U <sub>a</sub>	<b>150</b>	V
U <sub>g2</sub>	<b>150</b>	V
U <sub>g1</sub>	<b>-2,1</b>	V
I <sub>a</sub>	10	mA
I <sub>g2</sub>	3	mA
S	8,5	mA/V
R <sub>i</sub>	150	kΩ
$\mu_{g2/g1}$	36	

### Endpentode (System: L)

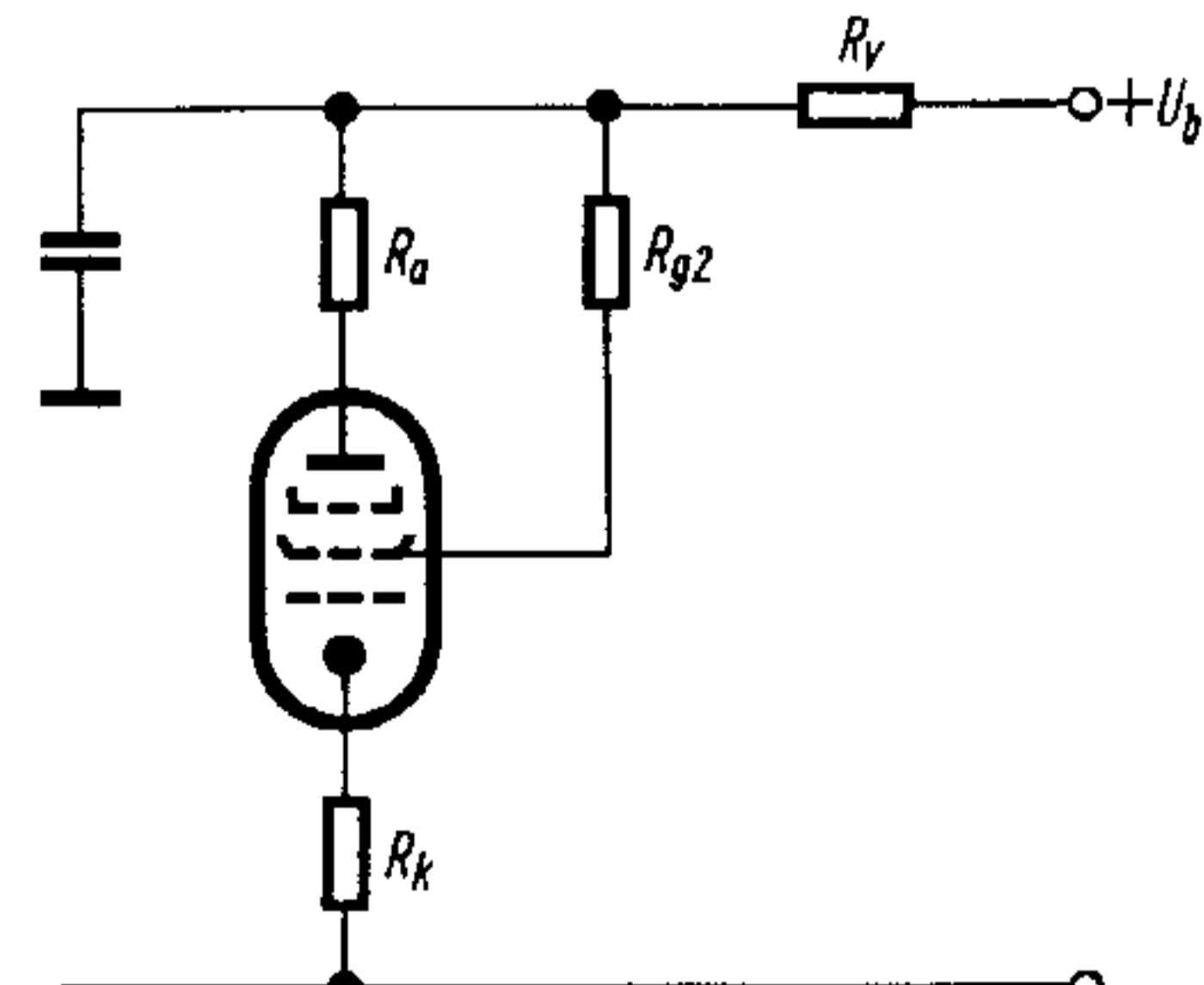
U <sub>a</sub>	<b>170</b>	V
U <sub>g2</sub>	<b>170</b>	V
U <sub>g1</sub>	<b>-2,6</b>	V
I <sub>a</sub>	30	mA
I <sub>g2</sub>	7	mA
S	21	mA/V
R <sub>i</sub>	33	kΩ
$\mu_{g2/g1}$	35	

## Betriebswerte · Typical operation

als Video-Endröhre · as video-power stage

System: L

U <sub>b</sub>	<b>220</b>	V
R <sub>v</sub>	<b>560</b>	Ω
R <sub>a</sub>	<b>2</b>	kΩ
R <sub>g2</sub>	<b>1</b>	kΩ
R <sub>k</sub>	<b>6,8</b>	Ω
U <sub>in sp sp<sup>1)</sup></sub>	(-0,4... -3) + (-3... -4)	V
U <sub>out sp sp</sub>	80 + 20	V
$\frac{S_{-3}}{S_{-0,4}} \text{ } ^2)$	$\geq 0,7$	
$\frac{S_{-4}}{S_{-0,4}} \text{ } ^2)$	$\geq 0,5$	



<sup>1)</sup> Momentanwerte von Bildinhalt und Synchronimpuls.

Momentary value of picture information and sync. pulse.

<sup>2)</sup> Verhältnis der dynamischen Steilheiten an den Aussteuerungsgrenzen für Bildinhalt und Synchronimpuls als Maß für die Verzerrung.

Ratio of dynamic transconductances at modulation limits for picture content and sync. pulse as measure for distortion.



**Kapazitäten · Capacitances****System: F**

$C_e$	10	pF
$C_a$	10,5	pF
$C_{g1/a}$	0,14	pF
$C_{g1/f}$	< 0,15	pF

**System: L**

$C_e$	13	pF
$C_a$	7	pF
$C_{g1/a}$	0,1	pF

zwischen System: F und System: L

between system: F and system: L

$C_{aF/aL}$	< 0,15	pF
$C_{g1F/g1L}$	< 0,01	pF
$C_{aF/g1L}$	< 0,005	pF
$C_{aL/g1F}$	< 0,1	pF

**Nennwert-Grenzdaten · Design centre ratings****System: F**

$U_{ao}$	<b>± 550</b>	V
$U_a$	<b>± 250</b>	V
$N_a$	<b>1,5</b>	W
$U_{g2o}$	<b>550</b>	V
$U_{g2}$	<b>250</b>	V
$N_{g2}$	<b>0,5</b>	W
$I_k$	<b>15</b>	mA
$R_{g1}^1)$	<b>1</b>	MΩ
$U_{f/k}$	<b>200</b>	V
$R_{f/k}^2)$	<b>20</b>	kΩ

**System: L**

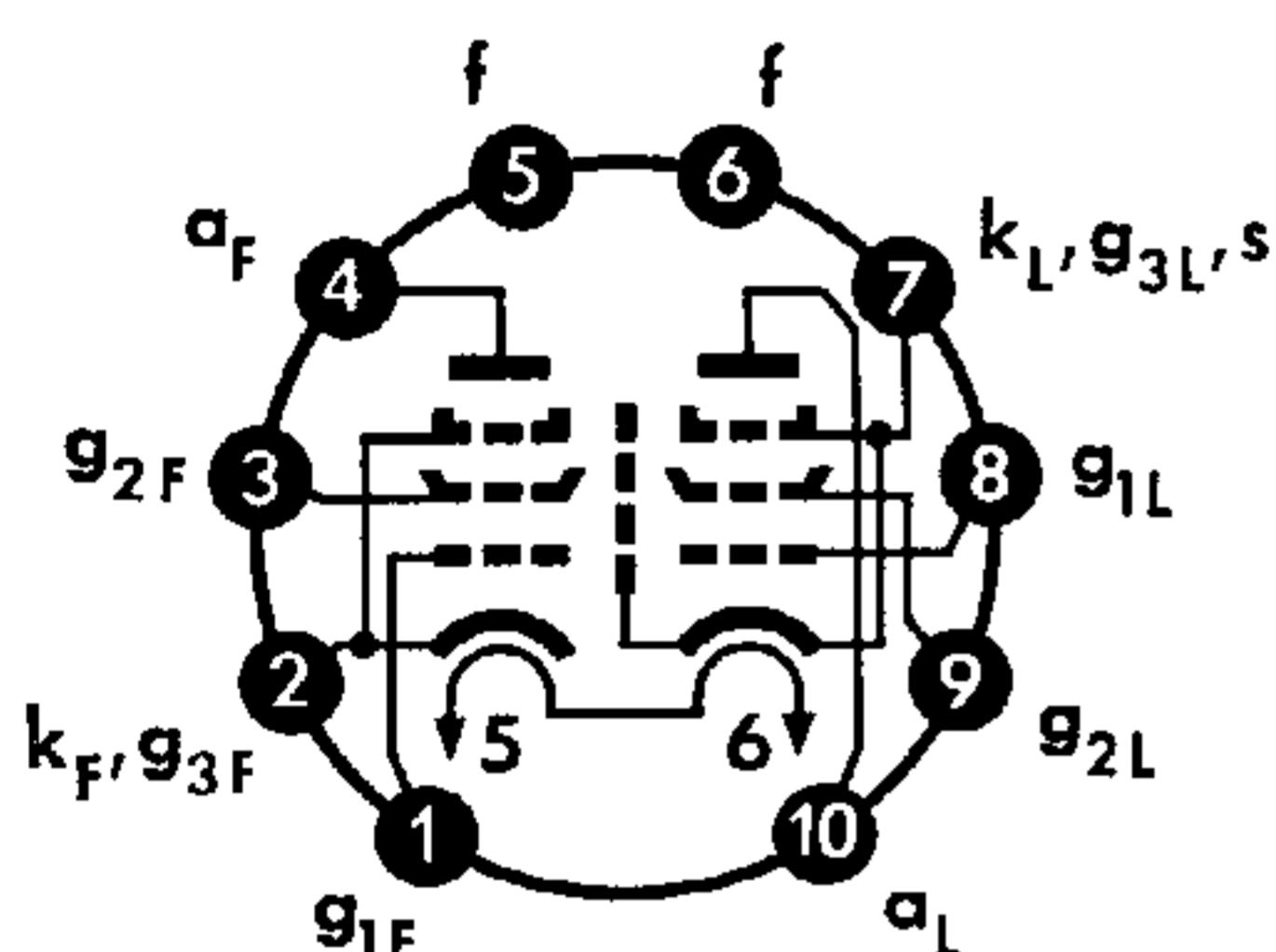
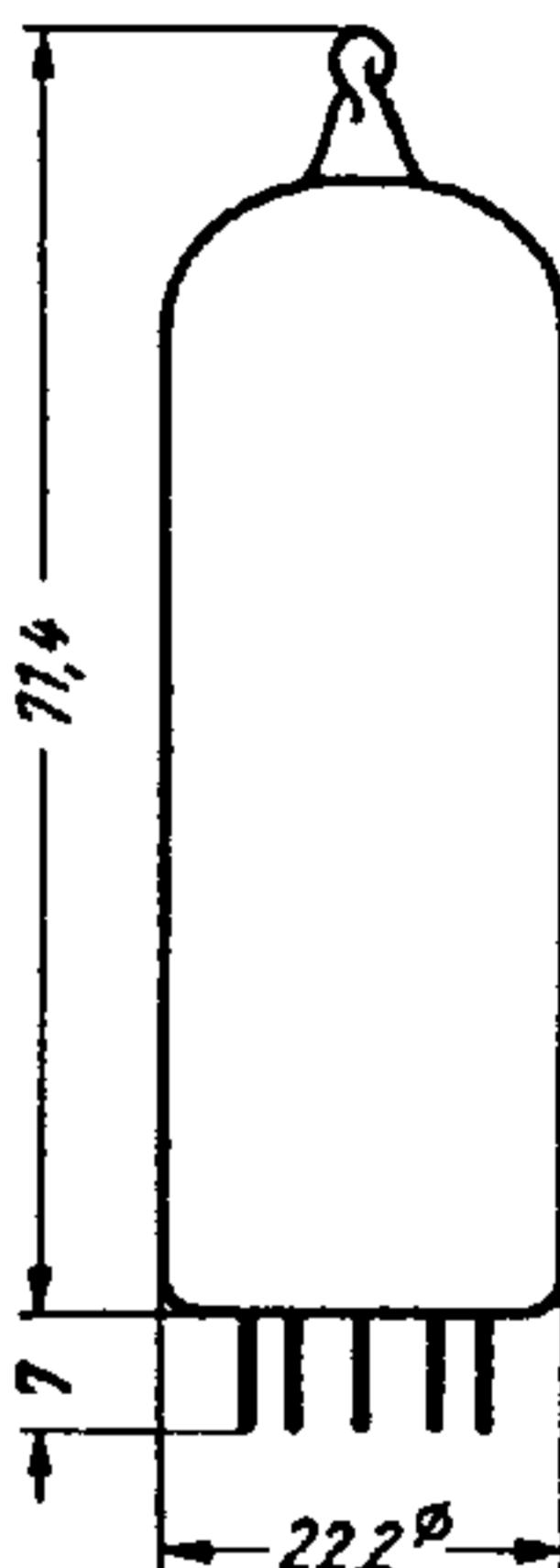
$U_{ao}$	<b>550</b>	V
$U_a$	<b>250</b>	V
$N_a$	<b>5</b>	W
$U_{g2o}$	<b>550</b>	V
$U_{g2}$	<b>250</b>	V
$N_{g2}^3)$	<b>2,5</b>	W
$I_k^3)$	<b>60</b>	mA
$R_{g1}^1)$	<b>0,5</b>	MΩ
$U_{f/k}$	<b>200</b>	V
$R_{f/k}$	<b>20</b>	kΩ

1)  $U_{g1}$  mittels  $R_k$  $U_{g1}$  by  $R_k$ 

2) max. 50 kΩ für getastete Schwundregelung.

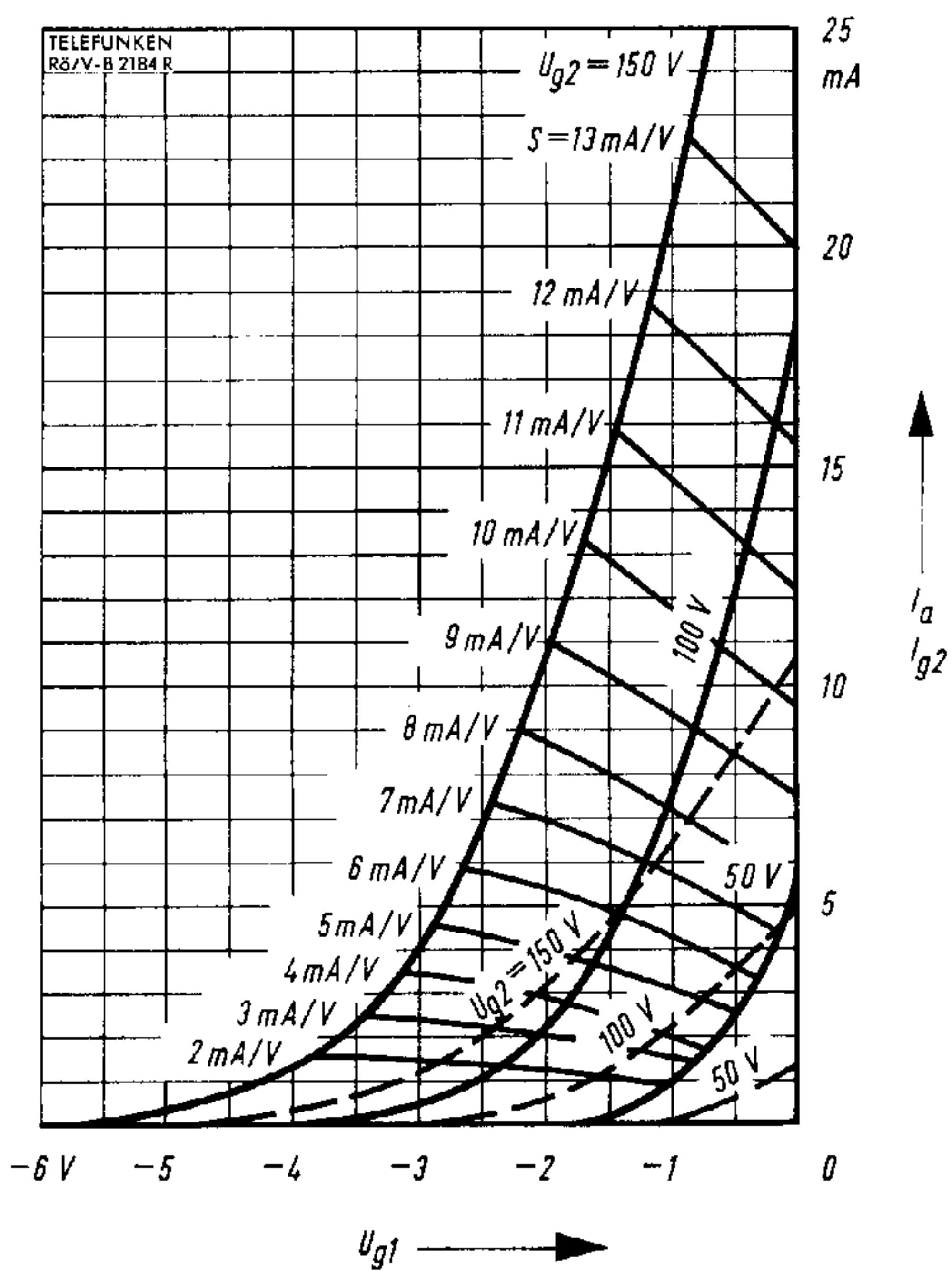
max. 50 kΩ for gated AGC

3) Bei fehlendem Eingangssignal darf während max. 1 Stunde  $N_{g2}$  auf max. 3,2 W und  $I_k$  auf max. 85 mA ansteigen.When no input signal is present  $N_{g2}$  may rise to max. 3.2 W and  $I_k$  to max. 85 mA during max. 1 hour.

**Sockelschaltbild****Base connection****Dekal****max. Abmessungen****max. dimensions****Gewicht · Weight****max. 20 g**

Wenn notwendig, muß gegen Herausfallen der Röhre aus der Fassung Vorsorge getroffen werden.

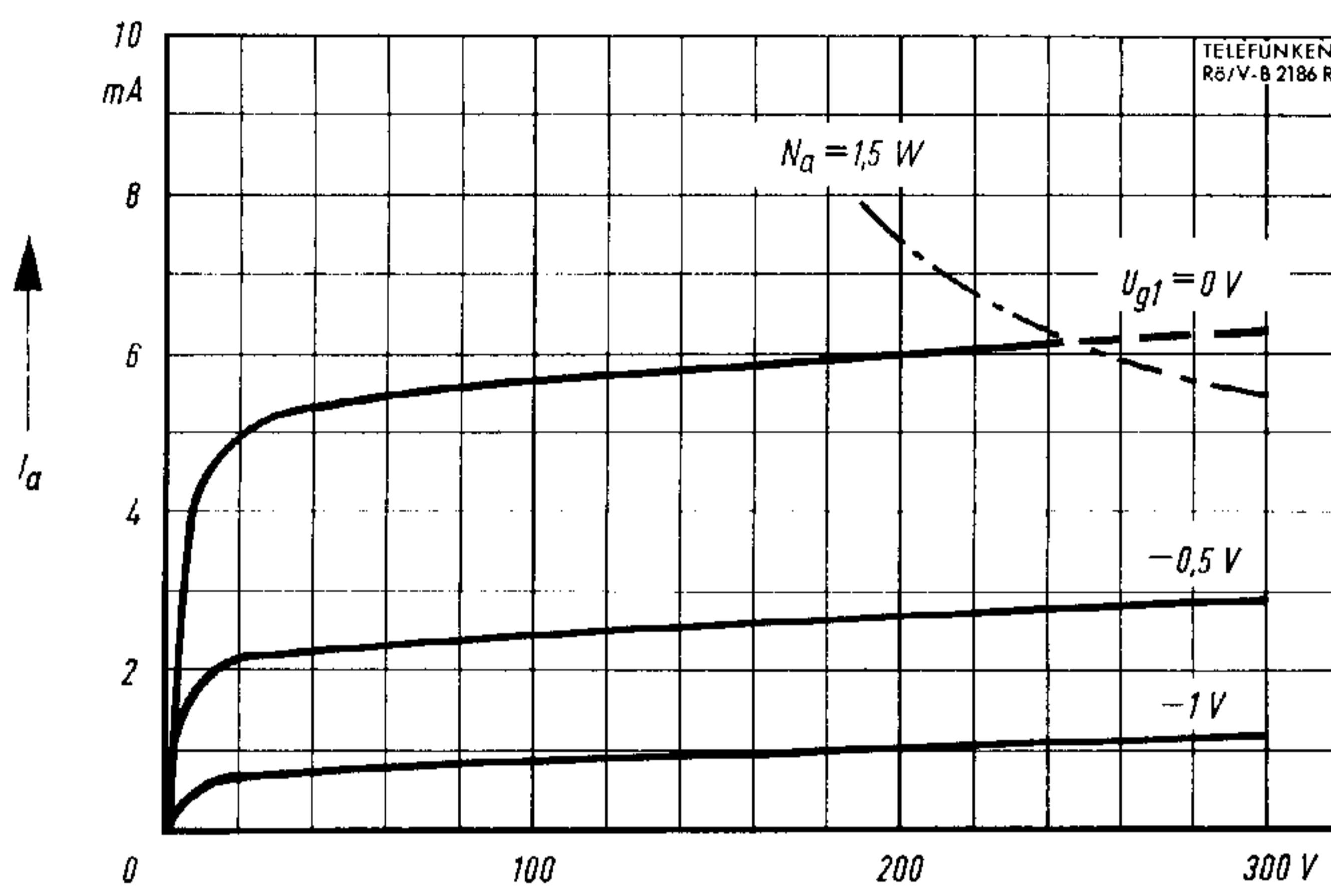
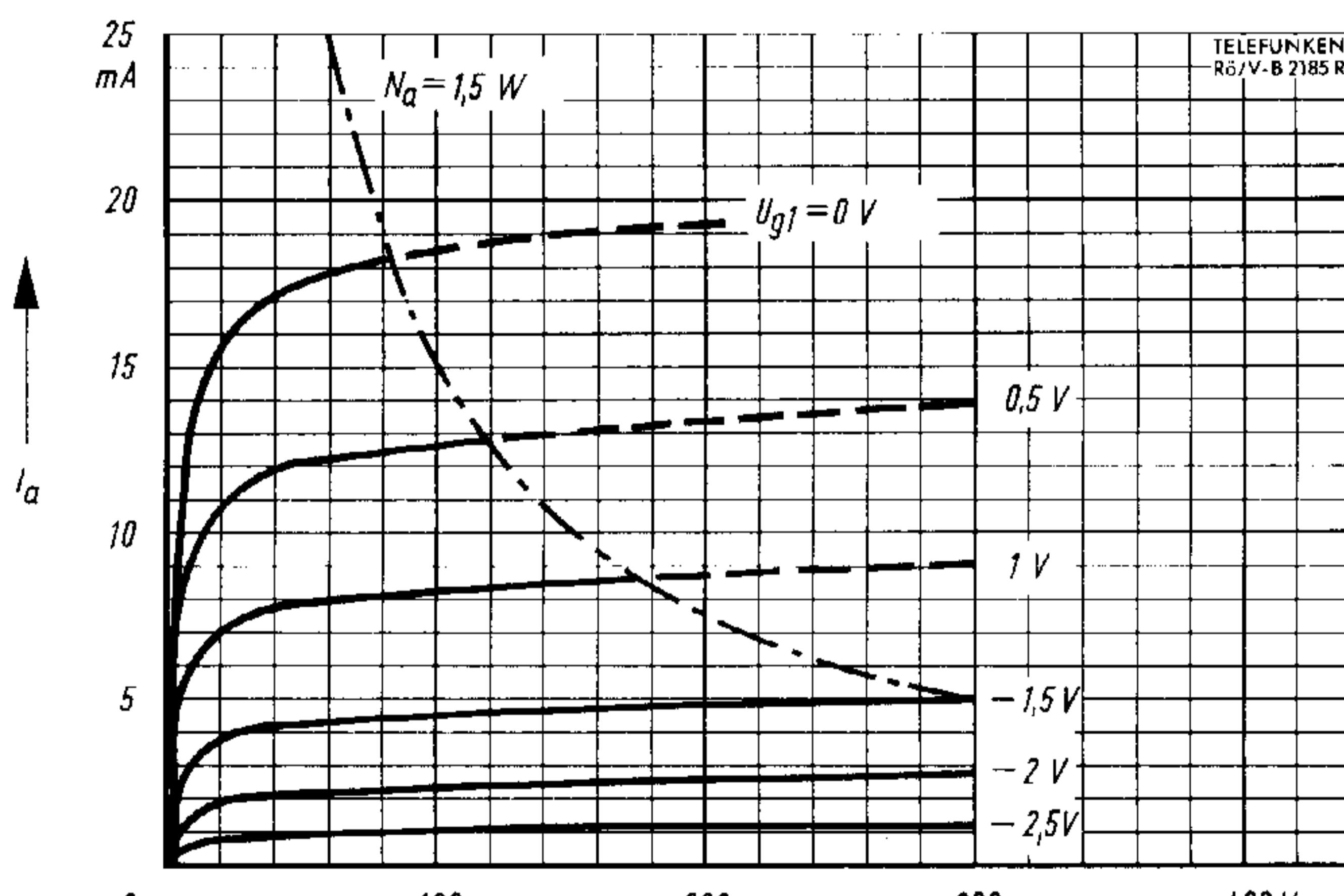
Special precautions must be taken to prevent the tube from becoming dislodged.

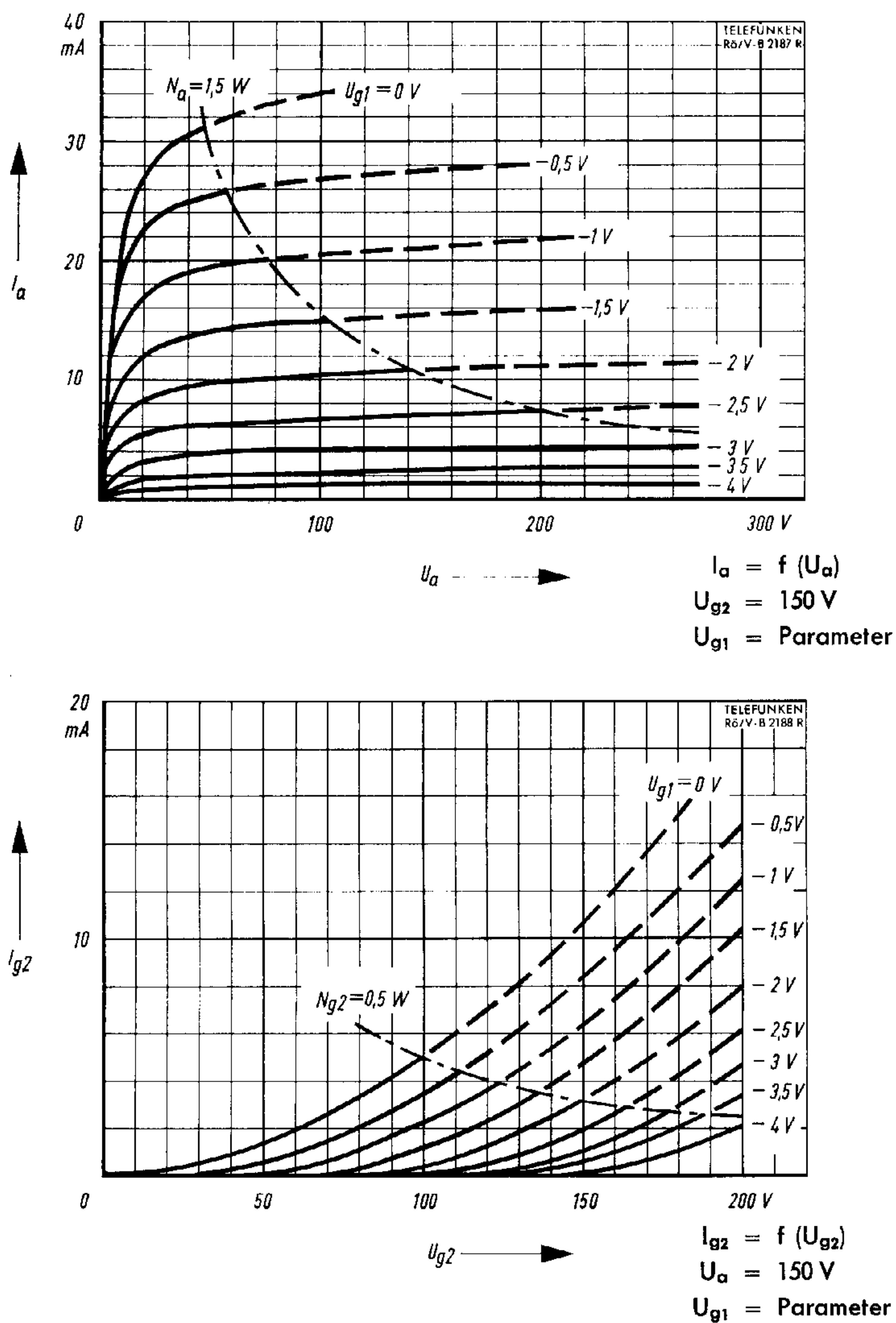


$I_a, I_{g2} = f(U_{g1})$   
 $U_a = 150 \text{ V}$   
 $U_{g2}, S = \text{Parameter}$

—  $I_a$       - - -  $I_{g2}$

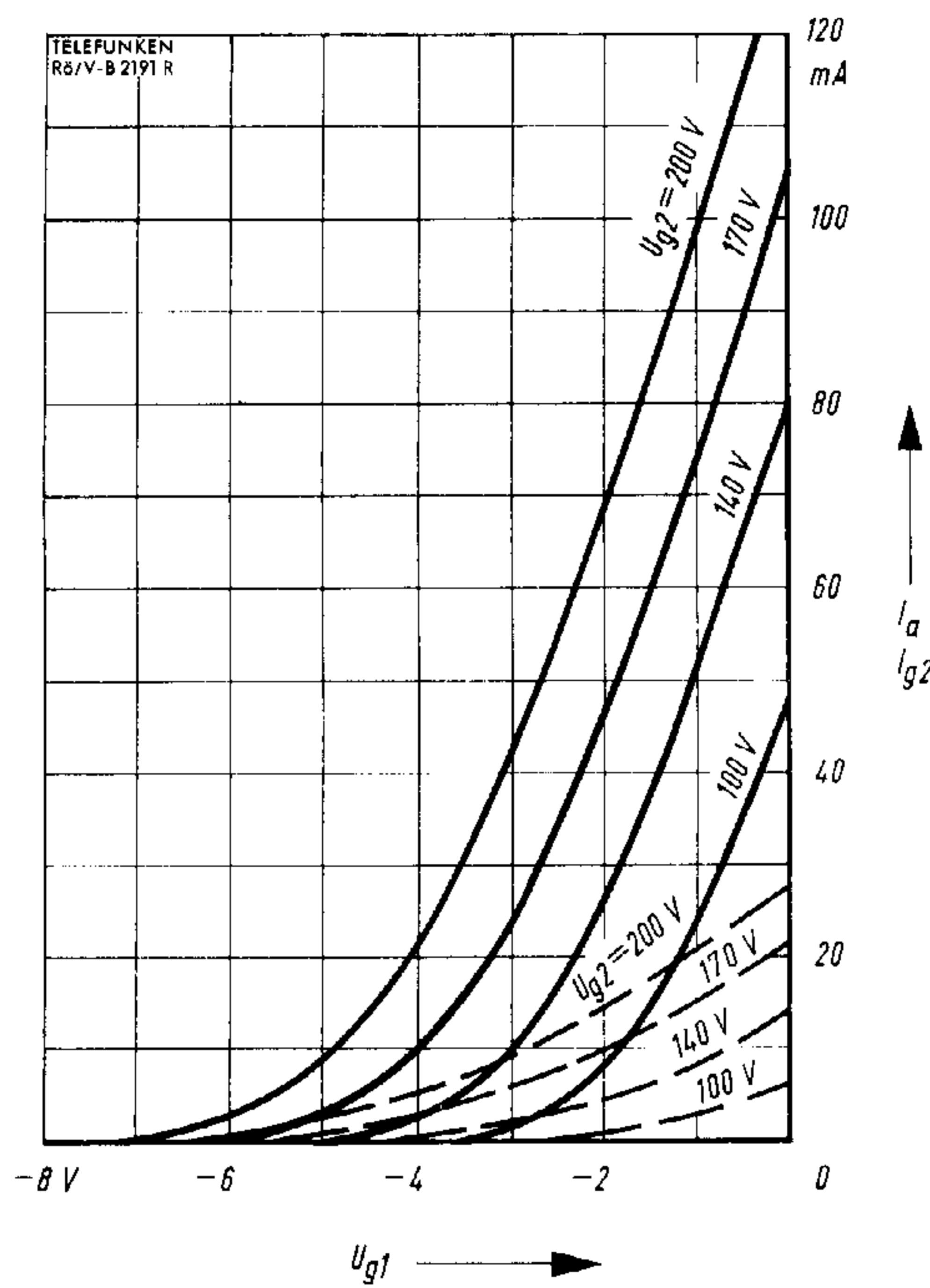
Pentode (F-System)

 $I_a = f(U_a)$  $U_{g2} = 50 \text{ V}$  $U_{g1} = \text{Parameter}$  $I_a = f(U_a)$  $U_{g2} = 100 \text{ V}$  $U_{g1} = \text{Parameter}$ **Pentode (F-System)**



Pentode (F-System)





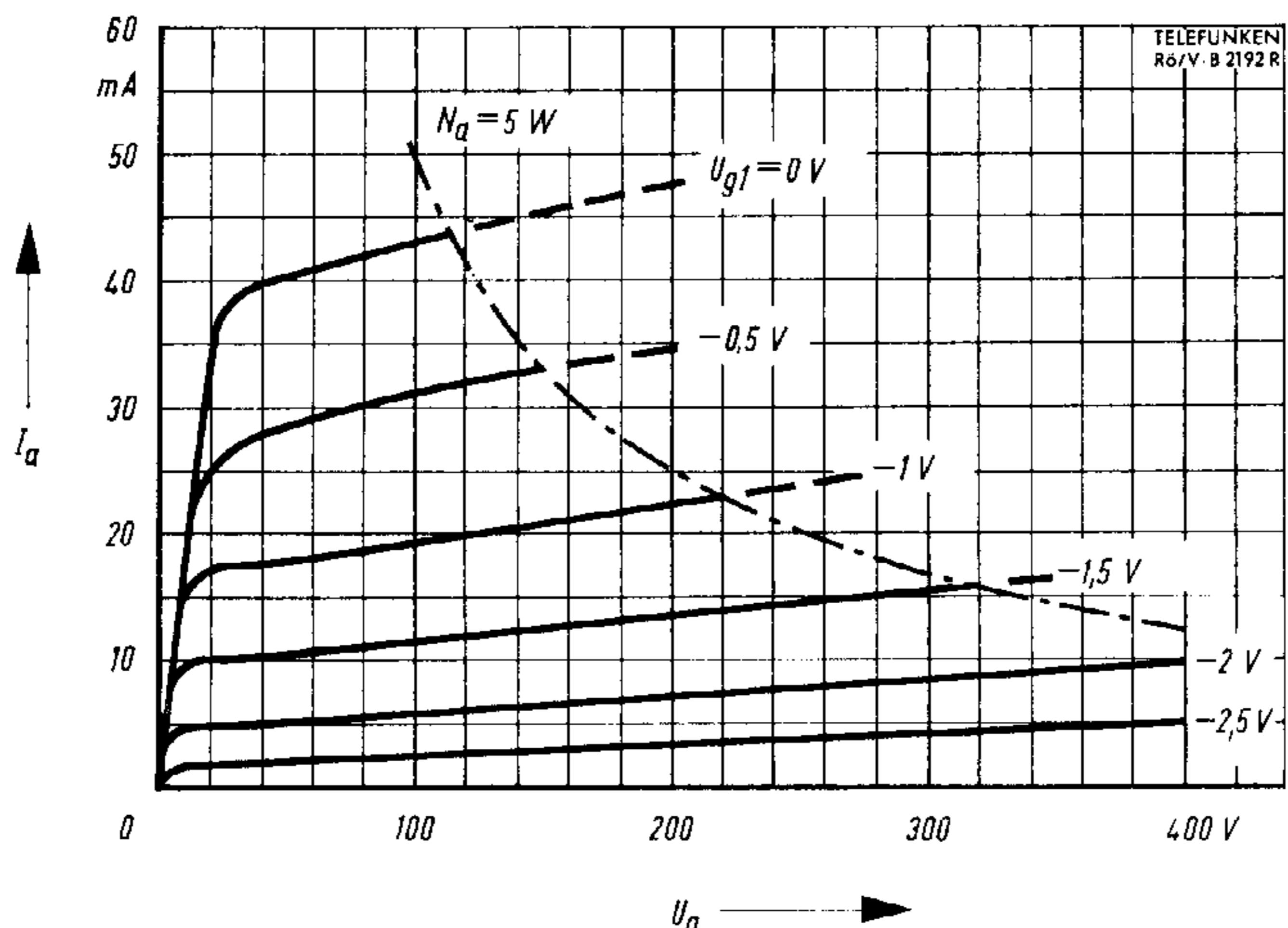
$$I_a, I_{g2} = f(U_{g1})$$

$$U_a = 200 \text{ V}$$

$U_{g2}$  = Parameter

—  $I_a$       - - -  $I_{g2}$

**Endpentode (L-System)**

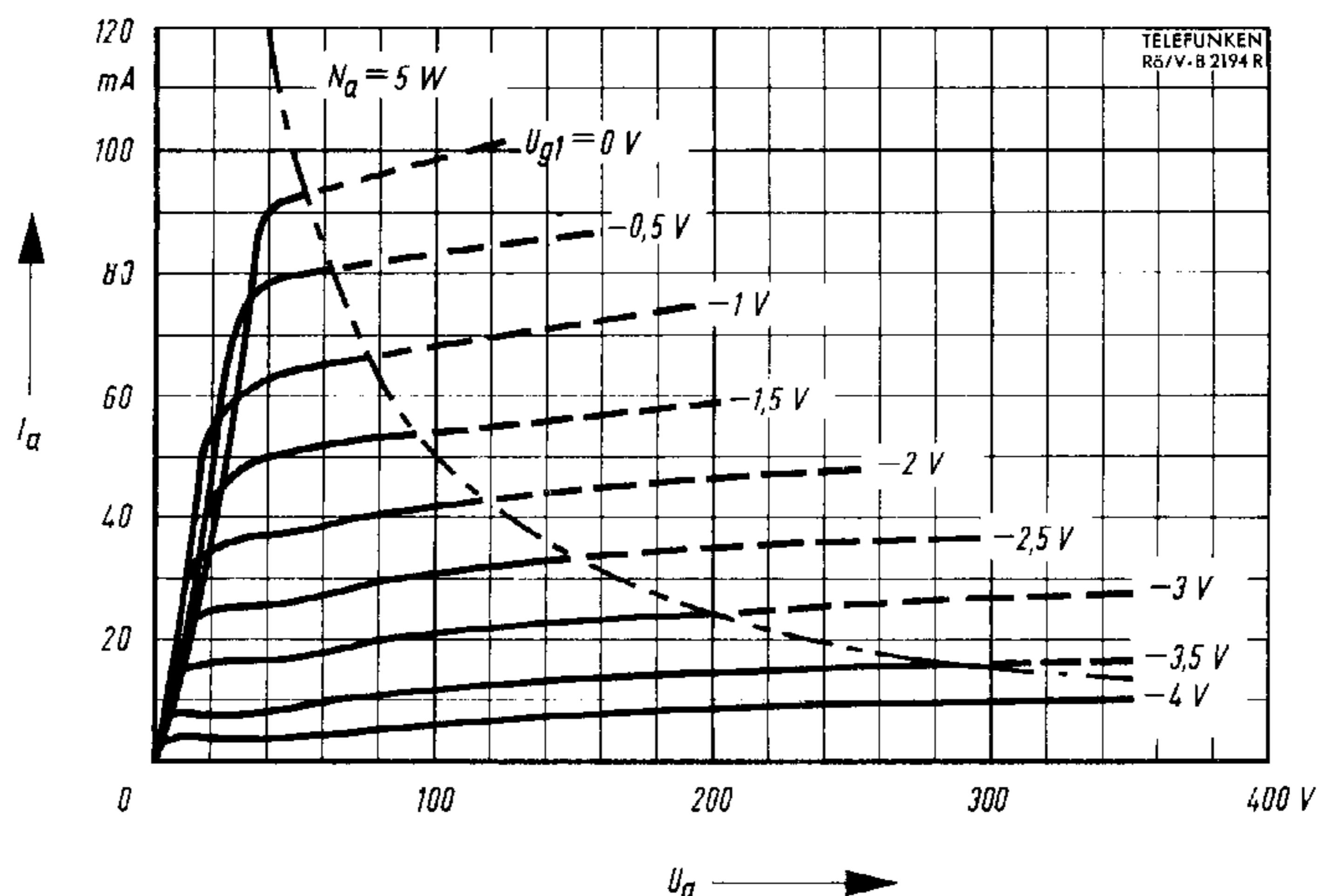


$$I_a = f(U_a)$$

$$U_{g2} = 100 \text{ V}$$

$U_{g1}$  = Parameter

**Endpentode (L-System)**



$$I_a = f(U_a)$$
$$U_{g2} = 170 \text{ V}$$
$$U_{g1} = \text{Parameter}$$

**Endpentode (L-System)**