

Netzröhre für GW-Heizung  
indirekt geheizt  
Parallel- oder Serienschaltung

# TELEFUNKEN

**EF 183**

DC-AC-heating  
indirectly heated  
connected in parallel or series

Regelbare steile HF-Pentode  
Remote cutoff RF-pentode

## Vorläufige technische Daten · Tentative data

$U_f$             **6,3**        V  
 $I_f$             **300**        mA

Normierte Anheizzeit · Normalize heating-up time

## Meßwerte · Measuring values

$U_a$	<b>200</b>	V
$U_{g3}$	<b>0</b>	V
$U_{g2}$	<b>90</b>	V
$U_{g1}$	<b>-2</b>	V
$I_a$	<b>12</b>	mA
$I_{g2}$	<b>4,5</b>	mA
S	<b>12,5</b>	mA/V
$R_i$	<b>500</b>	k $\Omega$
$r_e$ (40 MHz) <sup>1)</sup>	<b>10</b>	k $\Omega$

<sup>1)</sup> Stift 1 und Stift 3 verbunden  
Pin 1 connected to pin 3

## Betriebswerte · Typical operation

Es wird ein Betrieb mit Kathoden- und/oder Schirmgitterwiderstand empfohlen.  
Operation with cathode and/or screen grid resistor is recommended.

$U_a$	<b>170</b>		<b>200</b>		<b>230</b>	V	
$U_{g3}$	<b>0</b>		<b>0</b>		<b>0</b>	V	
$U_{bg2}$	<b>170</b>		<b>200</b>		<b>230</b>	V	
$R_{g2}$	<b>15</b>		<b>24</b>		<b>39</b>	k $\Omega$	
$U_{g1}$	<b>-1,8</b>	<b>-7,5</b>	<b>-2</b>	<b>-9,5</b>	<b>-2,1</b>	<b>-12</b>	V
$I_a$	<b>14</b>	<b>2,7</b>	<b>12</b>	<b>2,7</b>	<b>10,5</b>	<b>2,4</b>	mA
S	<b>14</b>	<b>0,7</b>	<b>12,5</b>	<b>0,62</b>	<b>10,6</b>	<b>0,5</b>	mA/V



**Grenzwerte** · Maximum ratings

$U_{ao}$	<b>550</b>	V
$U_a$	<b>250</b>	V
$N_a$	<b>2,5</b>	W
$U_{g2o}$	<b>550</b>	V
$U_{g2}$	<b>250</b>	V
$N_{g2}$	<b>0,65</b>	W
$U_{g1sp}$	<b>- 50</b>	V
$I_k$	<b>20</b>	mA
$R_{g1}^{1)}$	<b>0,5</b>	M $\Omega$
$R_{g1}^{2)}$	<b>1</b>	M $\Omega$
$R_{g3}$	<b>50</b>	k $\Omega$
$U_{fk}$	<b>150</b>	V
$R_{fk}$	<b>20</b>	k $\Omega$

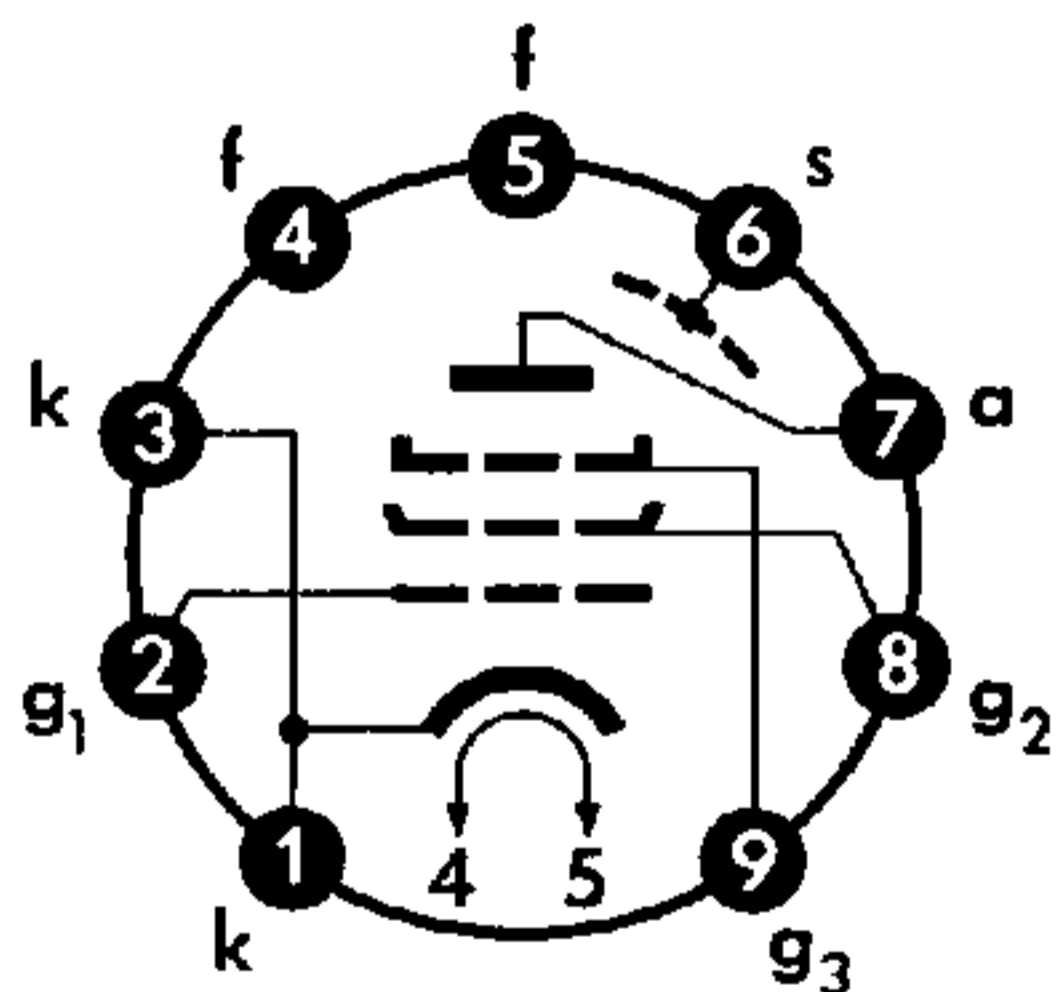
**Kapazitäten** · Capacitances

$C_e$	<b>9,5</b>	pF
$C_a$	<b>3</b>	pF
$C_{g1a}$	<b>&lt; 0,0055</b>	pF

1)  $U_{g1\text{fest}}$  · fixed grid bias

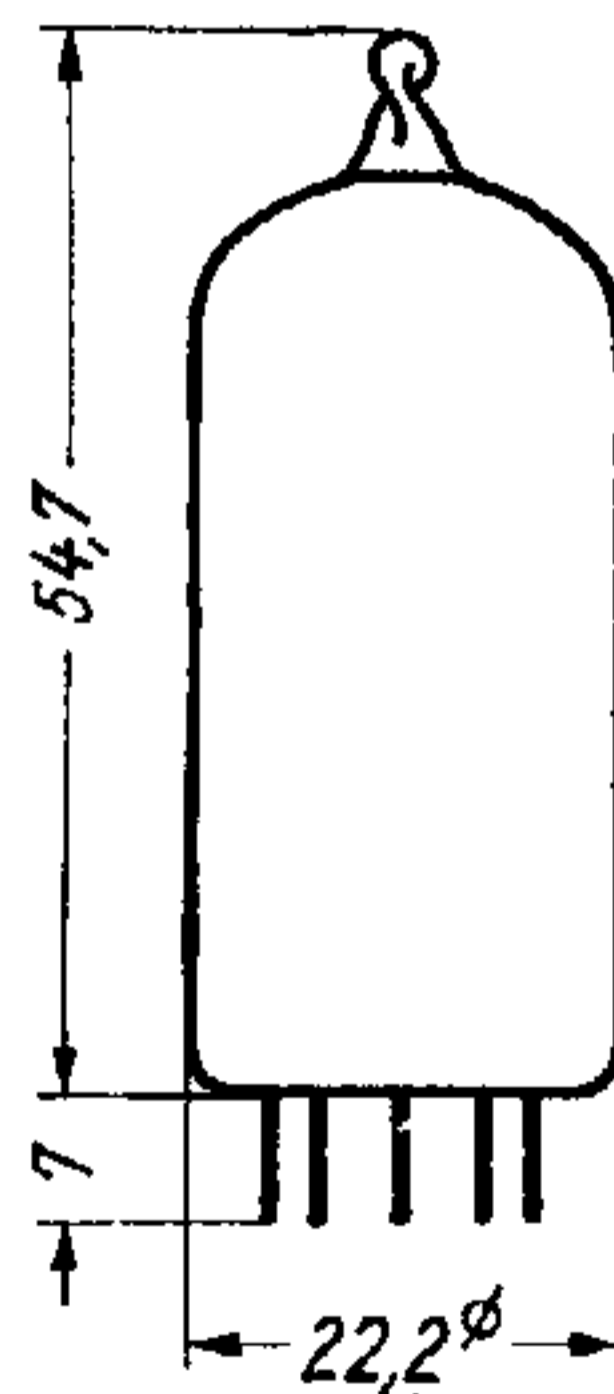
2)  $U_{g1\text{autom.}}$  · cathode grid bias

**Sockelschaltbild**  
Base connection



Pico 9 · Noval

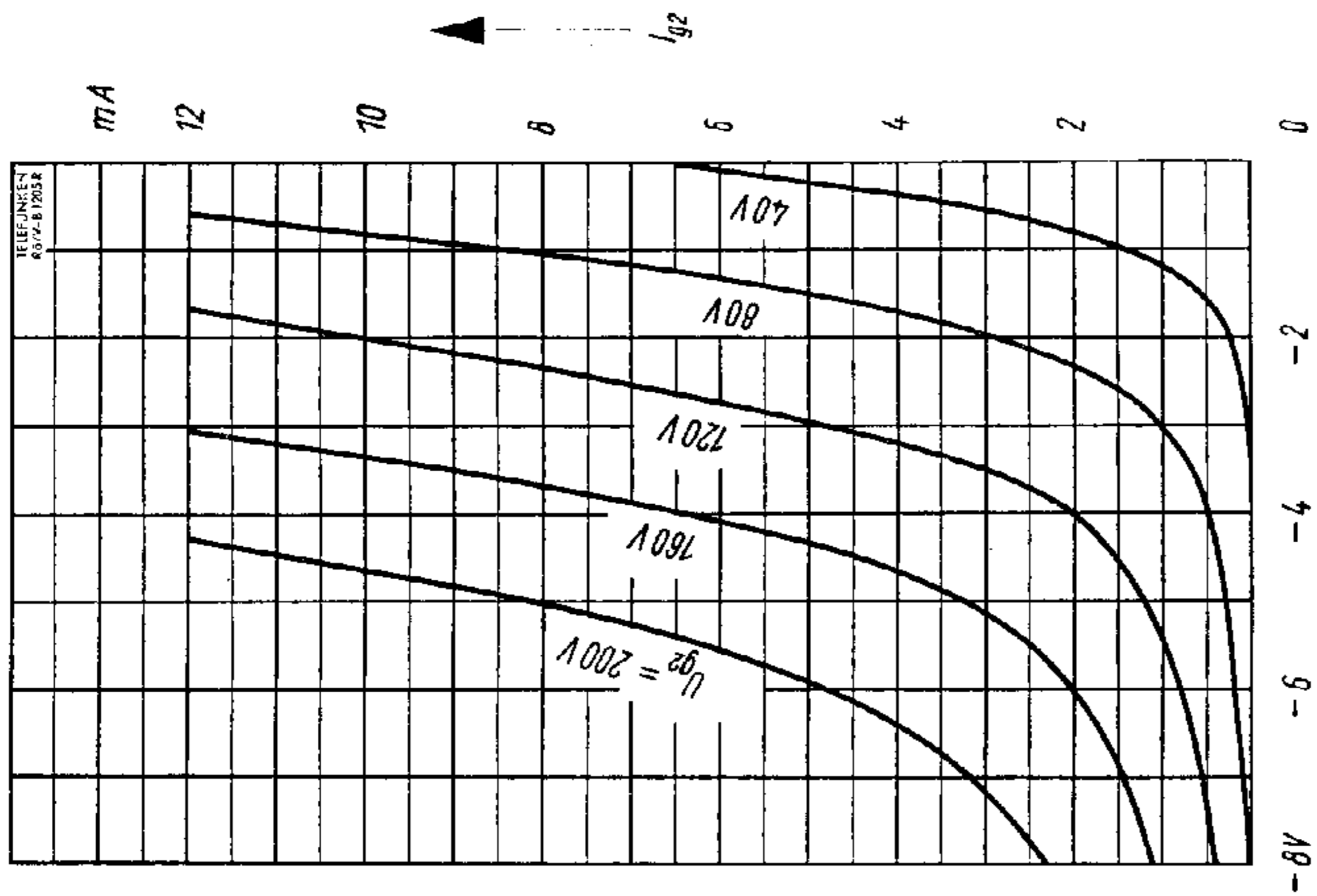
**max. Abmessungen**  
max. dimensions  
DIN 41539, Nenngröße 45, Form A



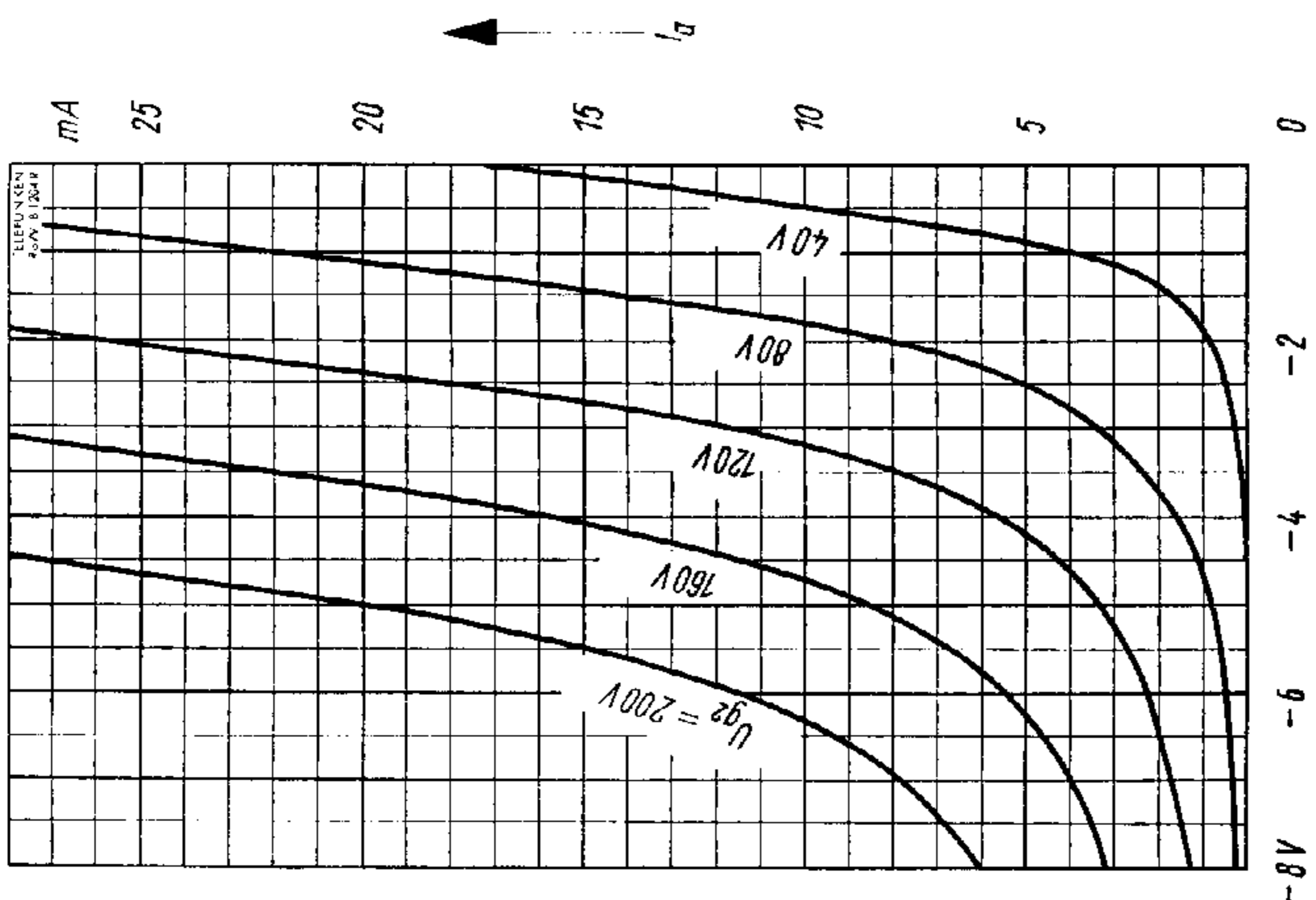
**Gewicht** · Weight  
max. 16 g

Wenn notwendig, muß gegen Herausfallen der Röhre aus der Fassung Vorsorge getroffen werden.  
Special precaution must be taken to prevent the tube from becoming dislodged.



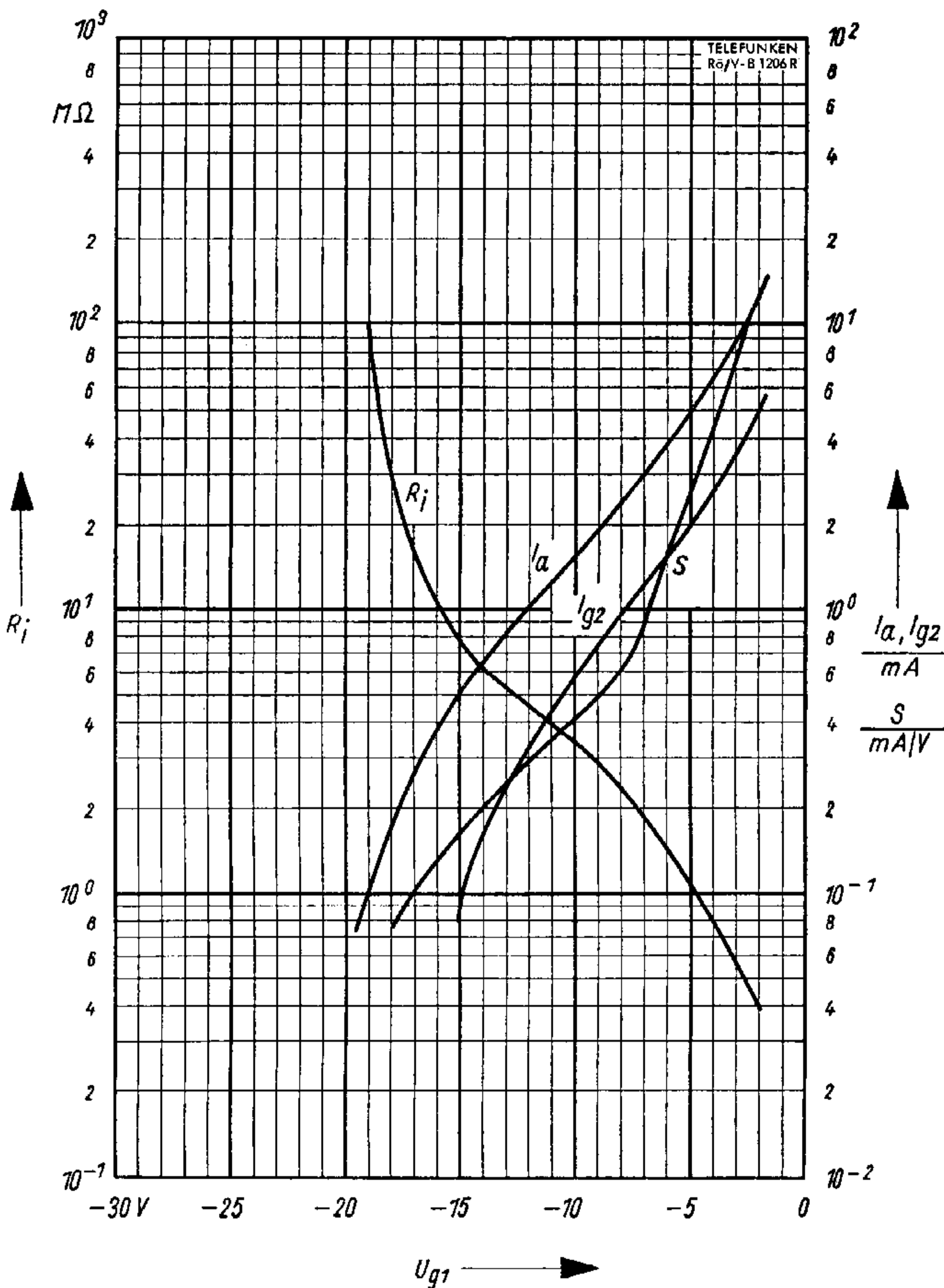


$I_{g2} = f(U_{g1})$   
 $U_a = 170 \dots 230 V$   
 $U_{g3} = 0 V$   
 $U_{g2} = \text{Parameter}$



$I_{g1} = f(U_{g1})$   
 $U_a = 170 \dots 230 V$   
 $U_{g3} = 0 V$   
 $U_{g2} = \text{Parameter}$





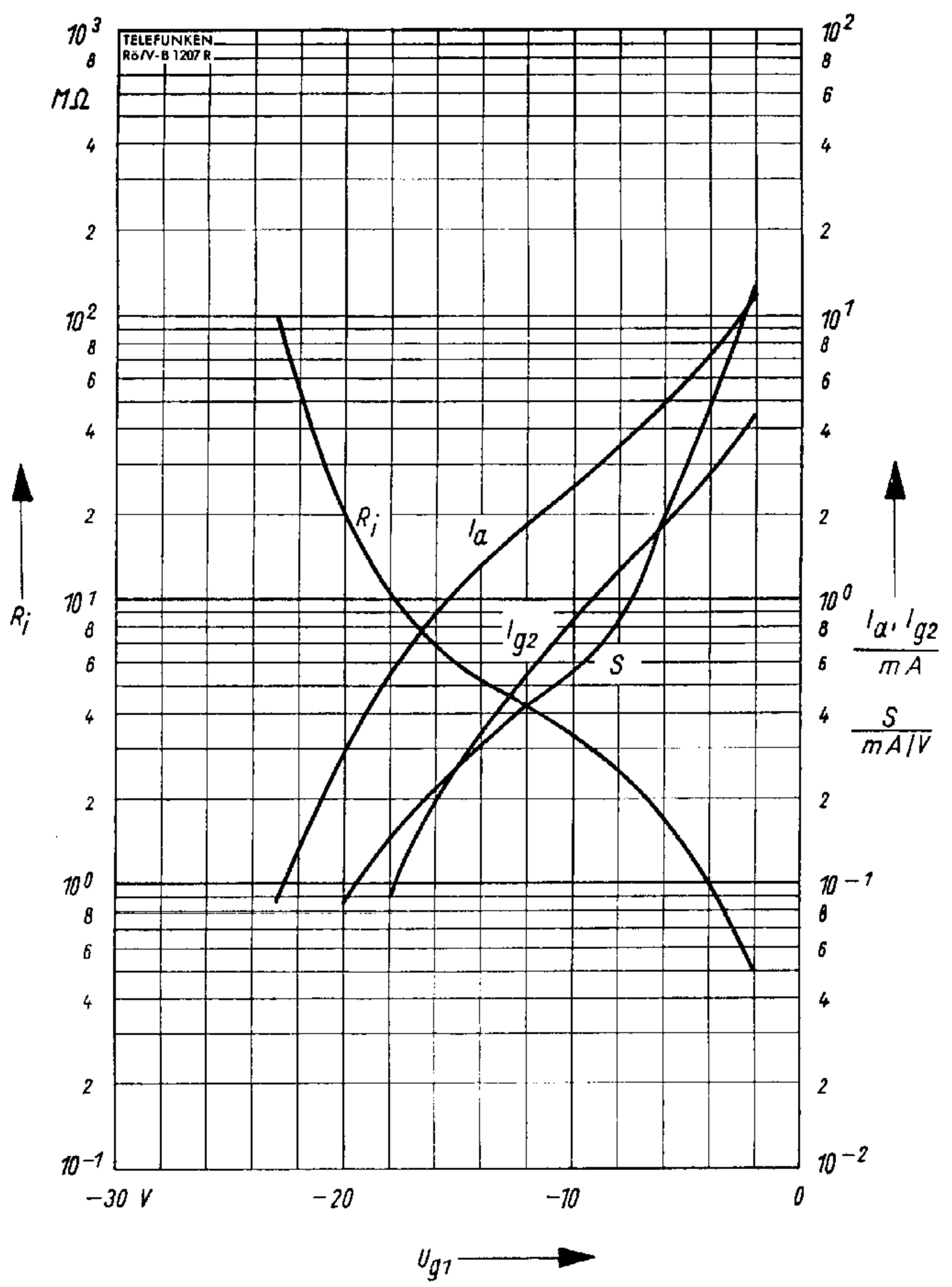
$$I_a, I_{g2}, S, R_i = f(U_{g1})$$

$$U_a = U_{bg2} = 170 V$$

$$R_{g2} = 15 k\Omega$$

$$U_{g3} = 0 V$$

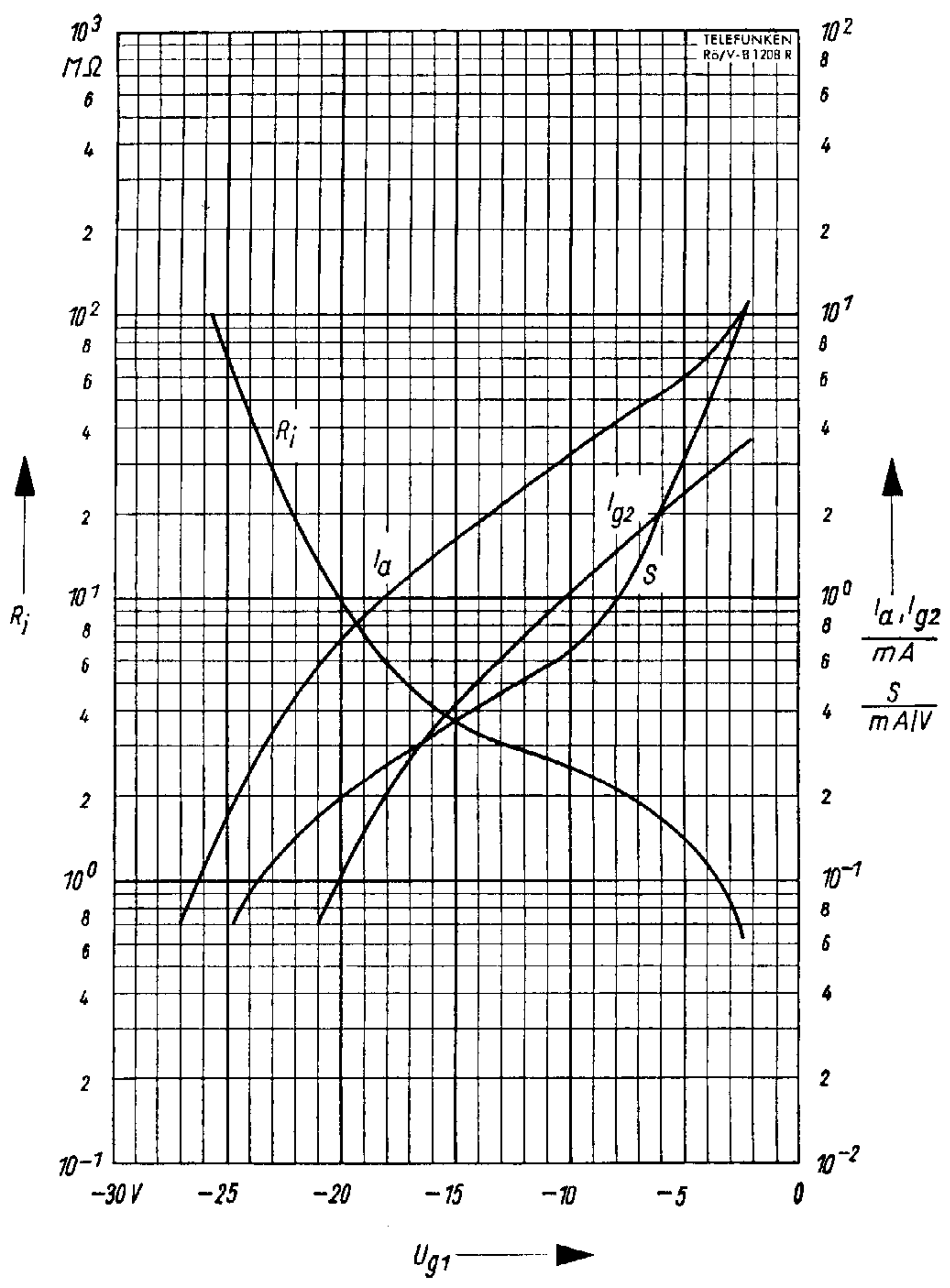




$I_a, I_{g2}, S, R_i = f(U_{g1})$   
 $U_a = U_{bg2} = 200 \text{ V}$   
 $R_{g2} = 24 \text{ k}\Omega$   
 $U_{g3} = 0 \text{ V}$

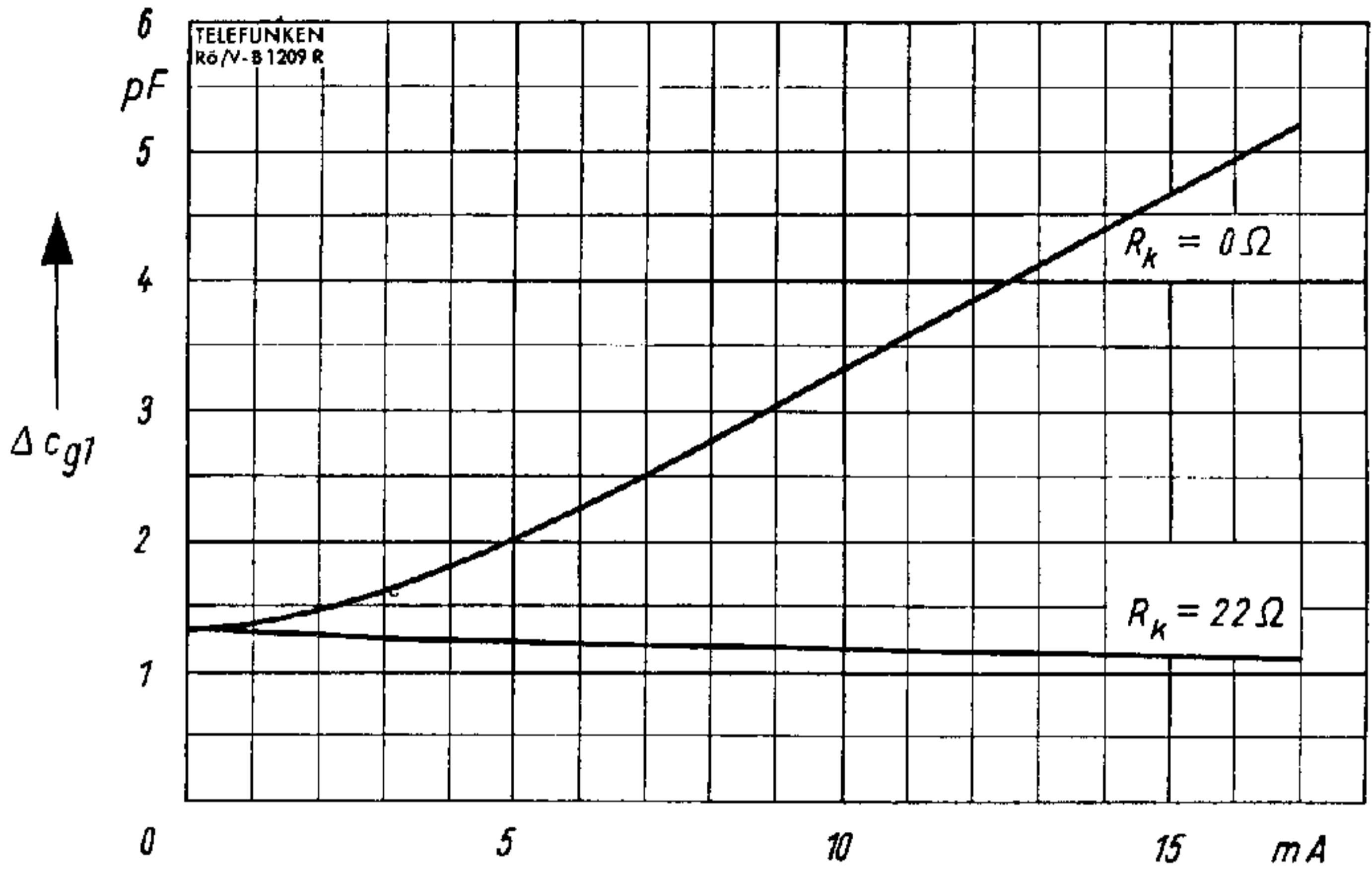


# TELEFUNKEN

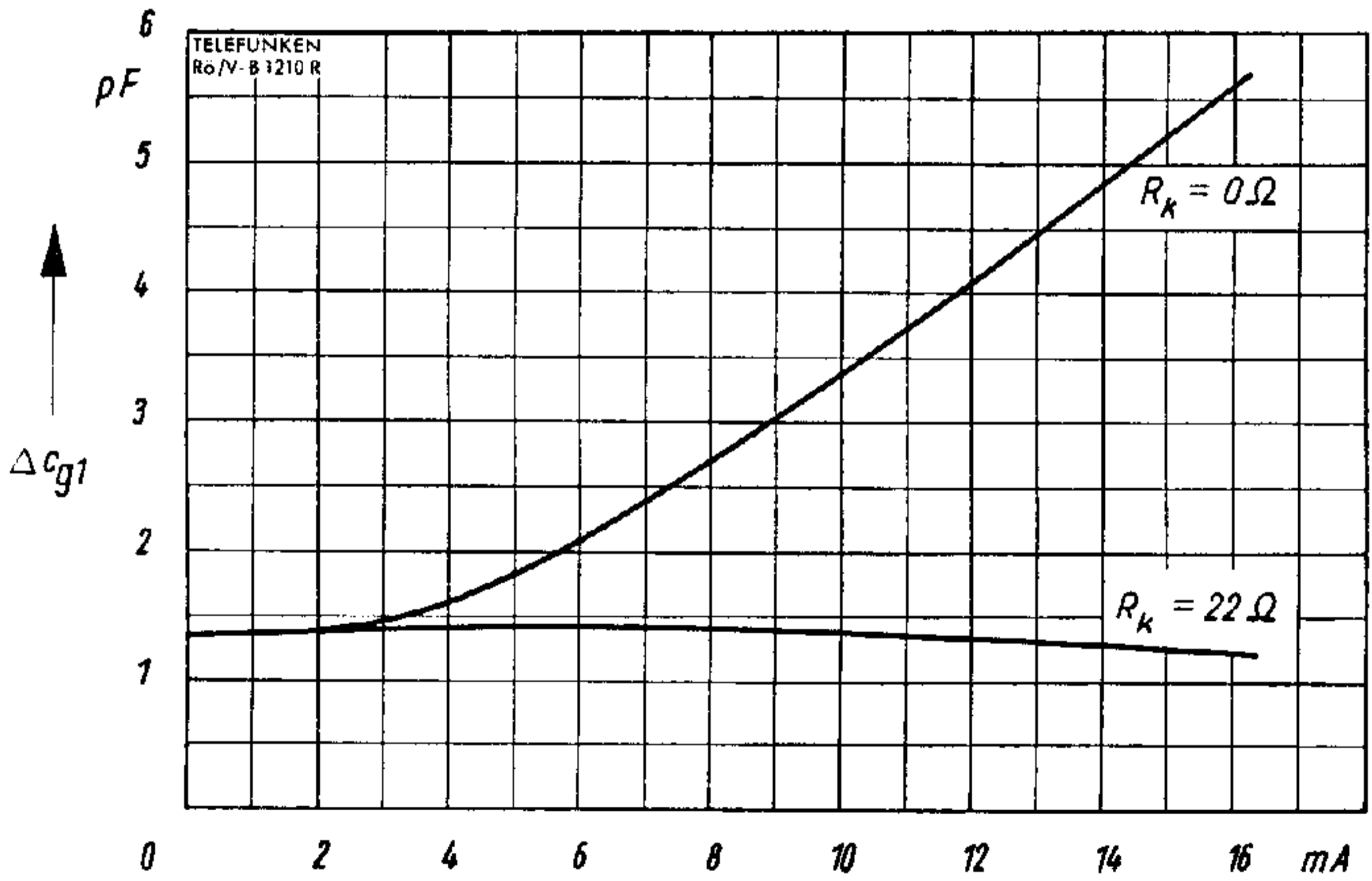


$I_a, I_{g2}, S, R_i = f(U_{g1})$   
 $U_a = U_{bg2} = 230 \text{ V}$   
 $R_{g2} = 29 \text{ k}\Omega$   
 $U_{g3} = 0 \text{ V}$





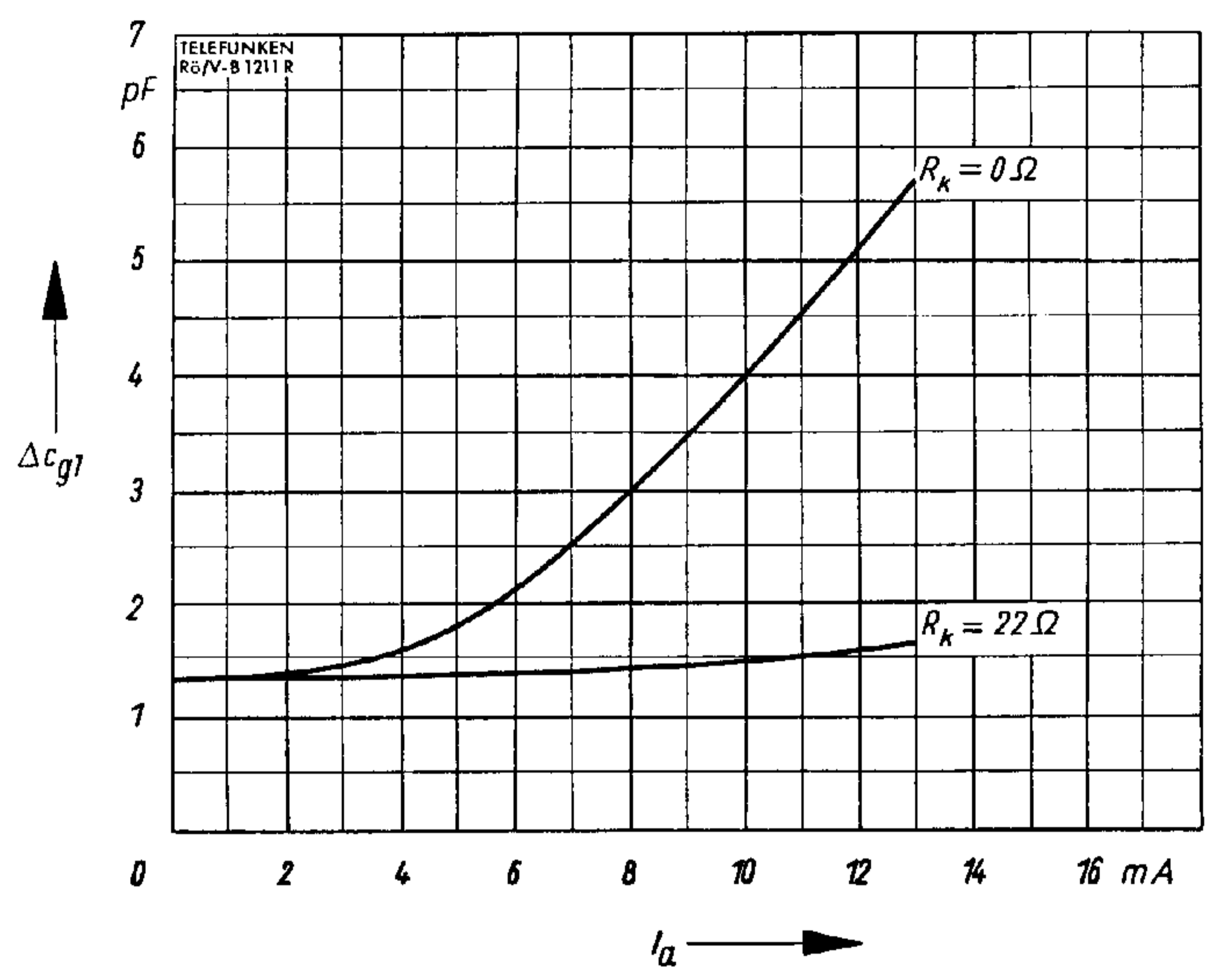
$U_a = U_{bg2} = 170 \text{ V}$   
 $R_{g2} = 15 \text{ k}\Omega$   
 $U_{g3} = 0 \text{ V}$   
 $R_k = \text{Parameter}$



$U_a = U_{bg2} = 200 \text{ V}$   
 $R_{g2} = 24 \text{ k}\Omega$   
 $U_{g3} = 0 \text{ V}$   
 $R_k = \text{Parameter}$



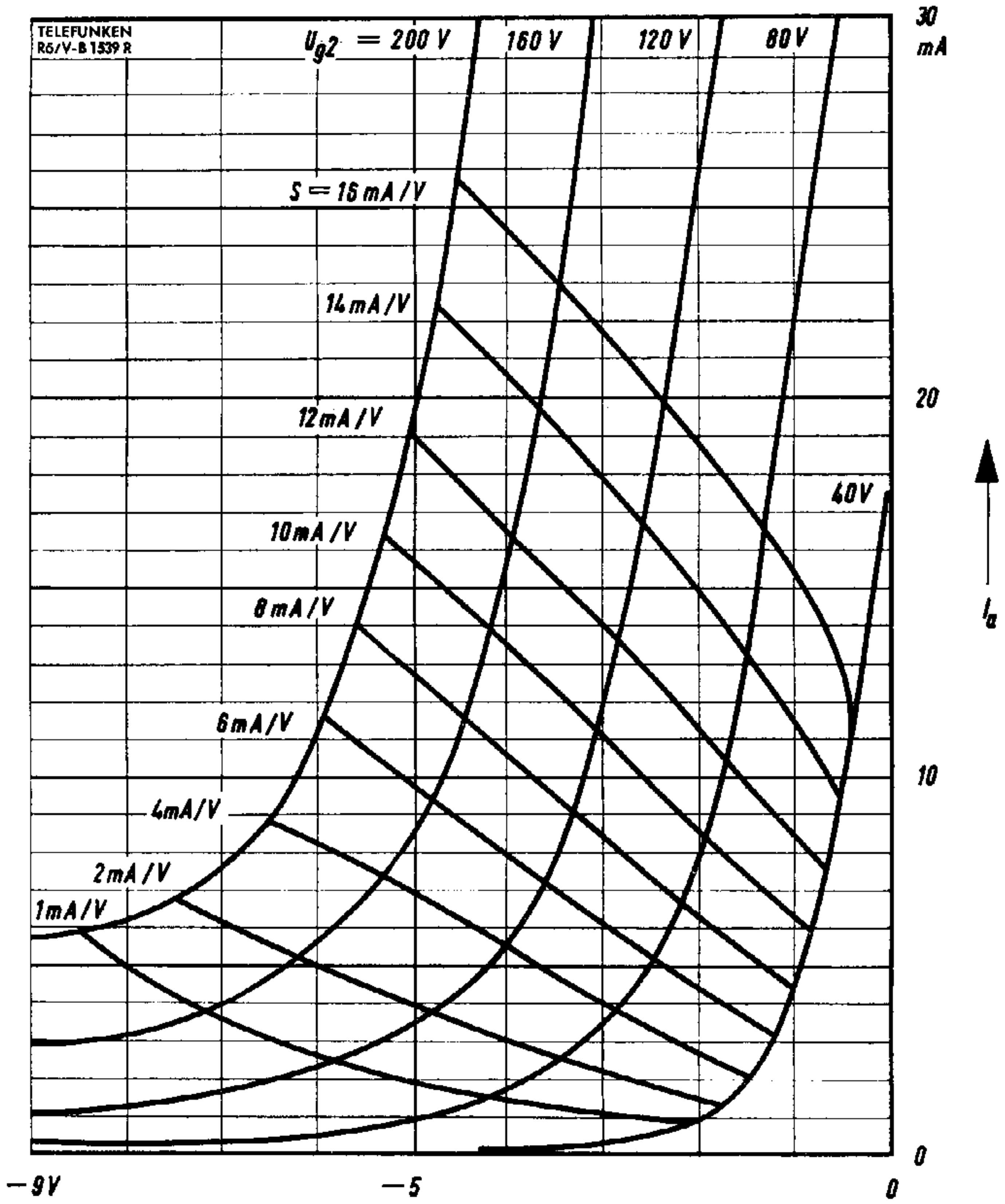
# TELEFUNKEN



$\Delta c_{g1} = f(I_a)$   
 $U_a = U_{bg2} = 230 \text{ V}$   
 $R_{g2} = 39 \text{ k}\Omega$   
 $U_{g3} = 0 \text{ V}$   
 $R_k = \text{Parameter}$







$I_a = f(U_{g1})$   
 $U_a = 170 \dots 230\text{ V}$   
 $U_{g3} = 0\text{ V}$   
 $U_{g2} = \text{Parameter}$   
 $S = \text{Parameter}$



