Netzröhre für GW-Heizung
indirekt geheizt
Serienspeisung

DC-AC-Heating
indirectly heated
connected in series

TELEFUNKEN

PL 81

Leistungspentode für Horizontal-Ablenkung

Power-Pentode for Horizontal-Deflection

U_f	21,5	V
I_f	**300**	mA

Meßwerte · Measuring Values

U_a	**170**	**200**	V
U_{g3}	**0**	**0**	V
U_{g2}	**170**	**200**	V
U_{g1}	−22	−28	V
I_a	**45**	**40**	mA
I_{g2}	3	2,8	mA
S	6,2	6	mA/V
R_i	10	11	kΩ
μ_{g2g1}	5,3	5,3	

Optimale Spitzenwerte des Anodenstromes bei Anwendung als Endröhre für Horizontalablenkung.

Die Kennlinien auf den Blättern 050259 ... 080259 geben die Werte mittlerer neuer Röhren an. Beim Entwurf der Schaltung für die horizontale Ablenkung ist zu beachten, daß sich infolge Röhrentoleranzen und Veränderungen während der Lebensdauer die angegebenen Werte um 25 % verringern können.

Optimal values of peak plate current when using as power tube for horizontal deflection.

Average values of new tubes are indicated by the curves of leaf 050259 ... 080259. When developing new circuits for horizontal deflection it is necessary to note that the indicated values, caused by a changing and by tolerances of tubes, may decrease during the life time to 25 %.

TELEFUNKEN

Betriebswerte · Typical Operation

2 Röhren in Gegentakt-B-Betrieb

2 tubes push-pull, Class B

U_a	**170**	**200**	V
U_{g3}	0	0	V
U_{bg2}	**170**	**200**	V
R_{g2} [1]	1	1	kΩ
U_{g1}	−27	−31,5	V
I_{ao}	**2×20**	**2×25**	mA
$I_{a\,ausgest.}$	2×73	2×87	mA
I_{g2o}	2×1,5	2×2	mA
$I_{g2\,ausgest.}$	2×10	2×12,5	mA
R_{aa}	2,5	2,5	kΩ
$U_{g1\sim}$ (N)	19	22,5	V_{eff}
N	13,5	20	W
k	5,2	5,2	%

[1]) R_{g2} gemeinsam · R_{g2} common

Grenzwerte · Maximum Ratings

Allgemein · General

U_{ao}	**550**	V
U_a	**250**	V
N_a	**8**	W
U_{g2o}	**550**	V
U_{g2}	**250**	V
N_{g2}	**4,5**	W
$N_a + N_{g2}$	**10**	W
I_k	**180**	mA
U_{g1e} ($I_{g1} = +0{,}3\ \mu A$)	**−1,3**	V
R_{g1}	**0,5**	MΩ
U_{fk}	**200**	V
R_{fk}	**20**	kΩ

Grenzwerte · Maximum Ratings

Als Endröhre für Horizontalablenkung

As power tube for horizontal deflection

U_{asp} [2])	**6**	kV
U_{asp} [2])	**−1,5**	kV
N_a	**7**	W
N_{g2} [3])	**4,5**	W
U_{g1sp} [2])	**3**	V
U_{g1sp} [2])	**−1000**	V
R_{g1} [4])	**2,2**	MΩ

[2]) Impulsdauer max. 18% einer Periode, $t_{max} = 18\ \mu s$
Impulse duration max. 18% per period, $t_{max} = 18\ \mu s$

[3]) Während der Anheizzeit der Boosterdiode $N_{g_2\,max} = 6$ W
During booster diode heating-up period $N_{g_2\,max} = 6$ W

[4]) U_{g_1} durch R_{g_1} erzeugt
U_{g_1} only produced by R_{g_1}

TELEFUNKEN

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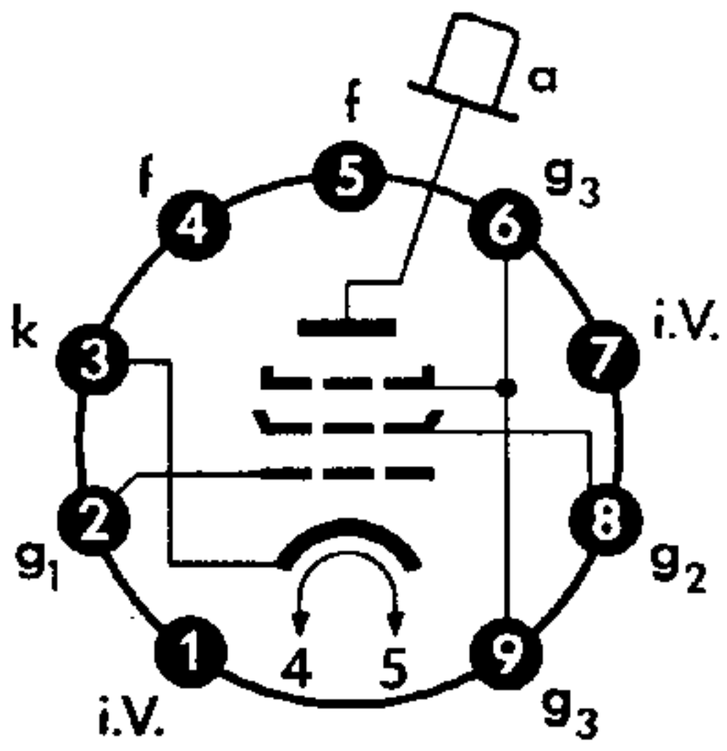
Kapazitäten · Capacitances

c_e		14,7	pF
c_a		6,4	pF
c_{g1a}	<	0,8	pF
c_{ak}	<	0,1	pF
c_{g1f}	<	0,2	pF

Sockelschaltbild
Base connection

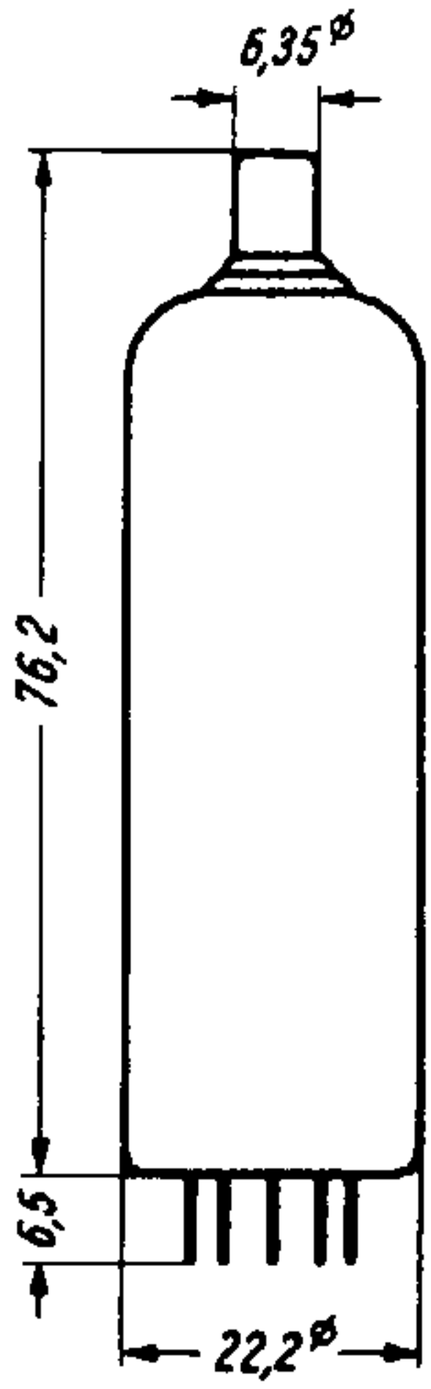


Freie Stifte bzw. freie Fassungskontakte dürfen nicht als Stützpunkte für Schaltmittel benutzt werden.

Free pins not to be connected externally.

max. Abmessungen
max. Dimensions

DIN 41539, Nenngröße 62, Form B

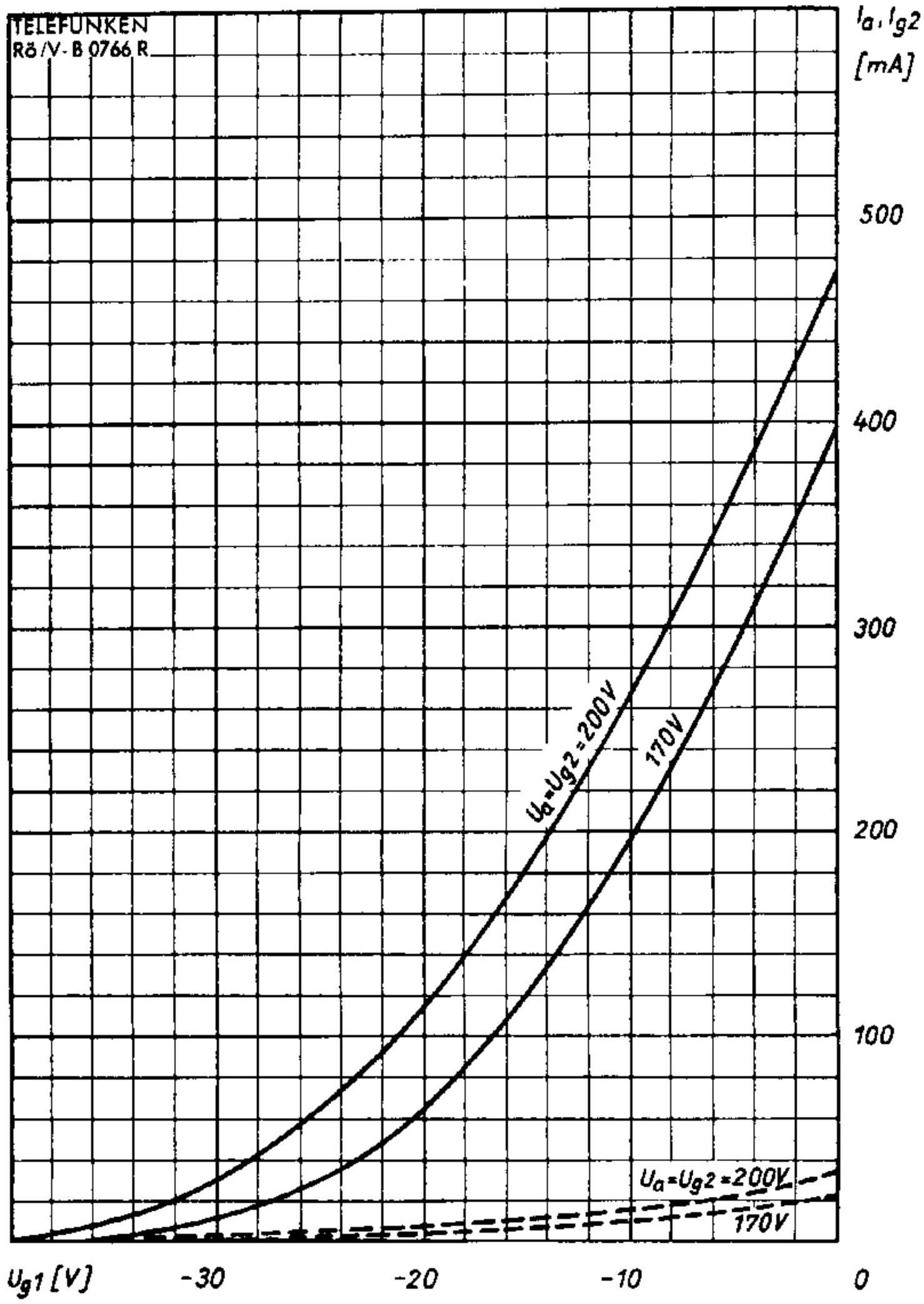


Gewicht · Weight
max. 22 g

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

PL 81

TELEFUNKEN

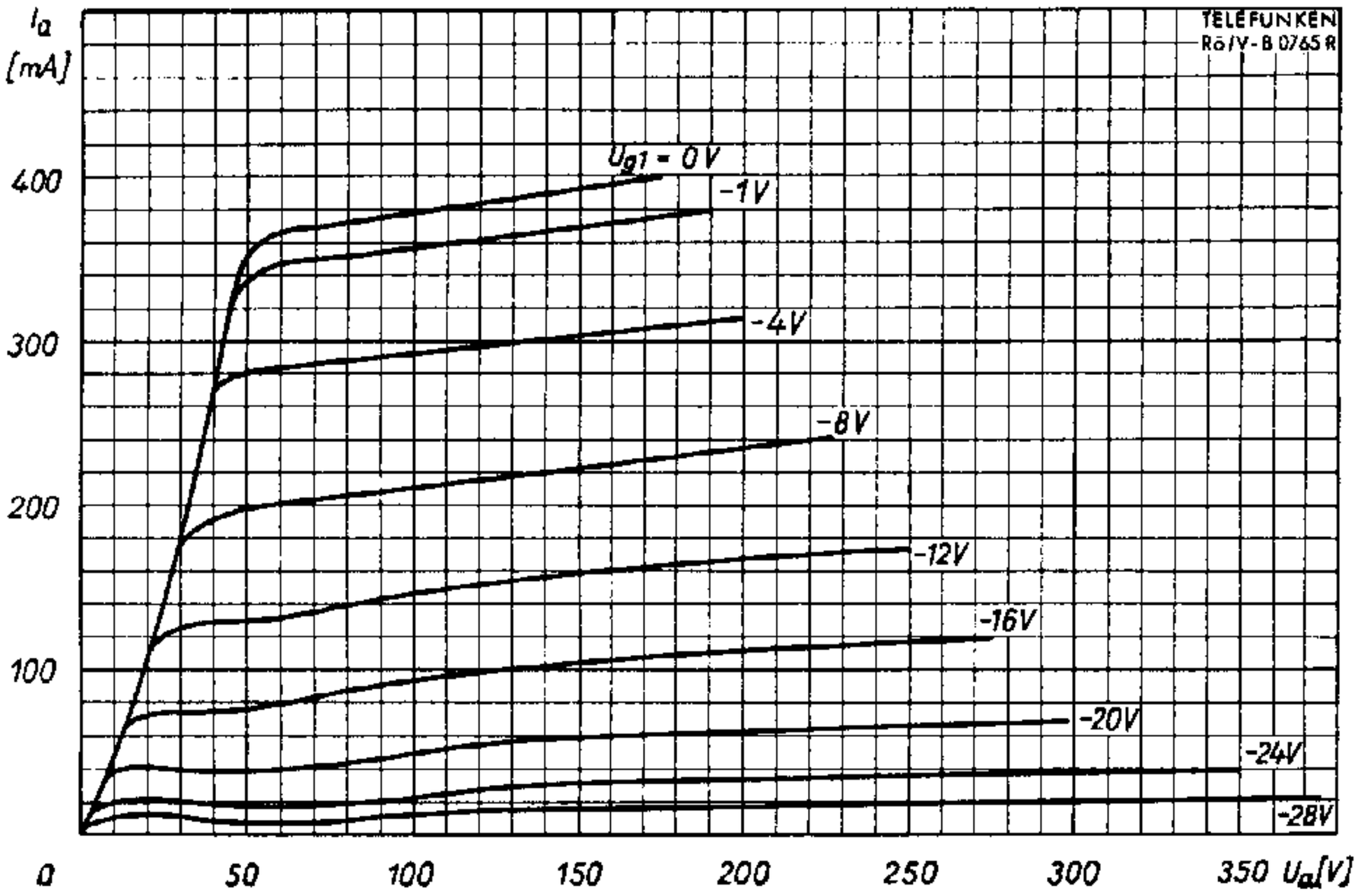


$I_a, I_{g2} = f(U_{g1})$

$U_{g3} = 0\ V$

$U_a = U_{g2}$ = Parameter

——— I_a ---- I_{g2}

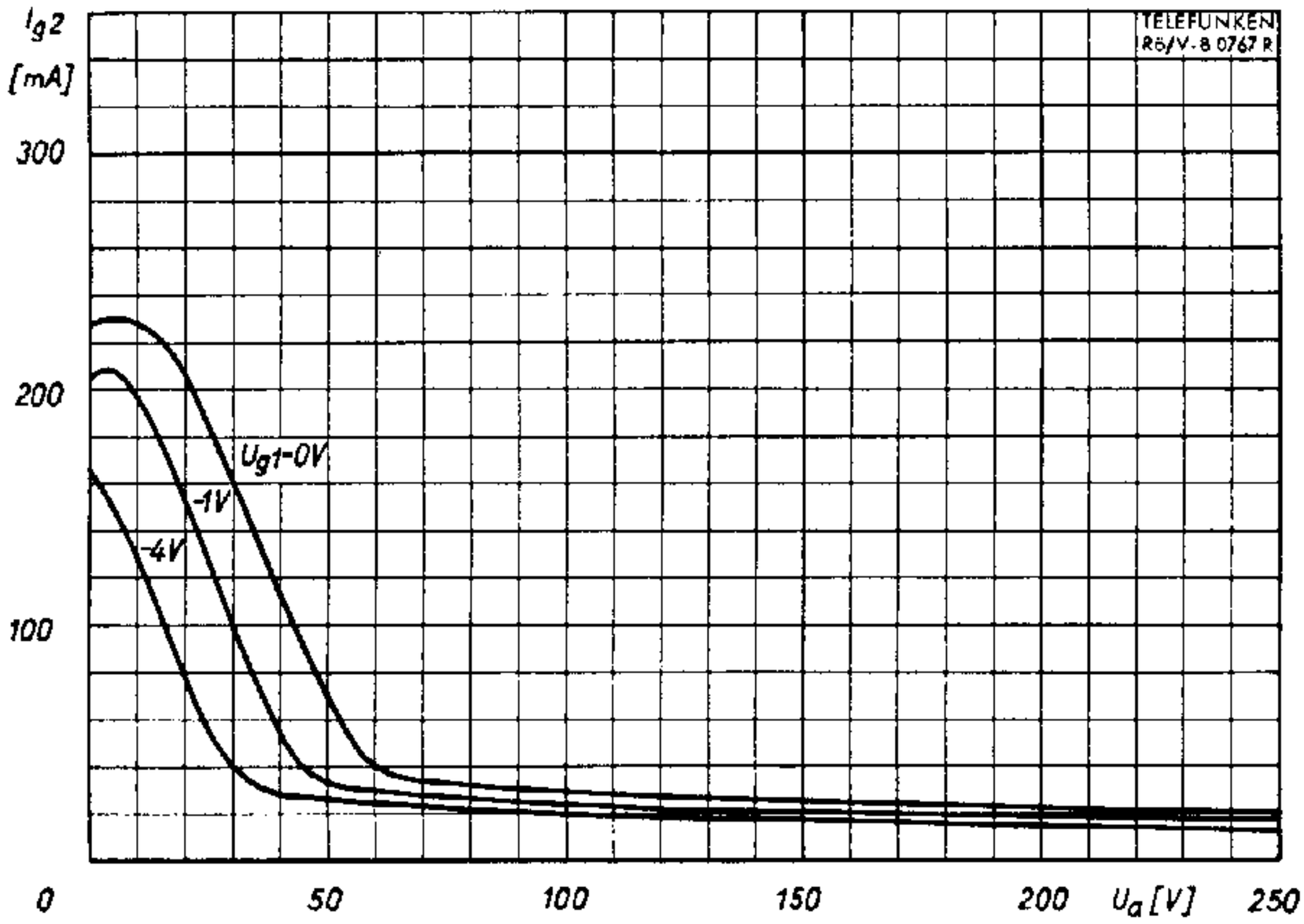


$I_a = f(U_a)$

$U_{g3} = 0\ V$

$U_{g2} = 170\ V$

$U_{g1} =$ Parameter



$I_{g2} = f(U_a)$

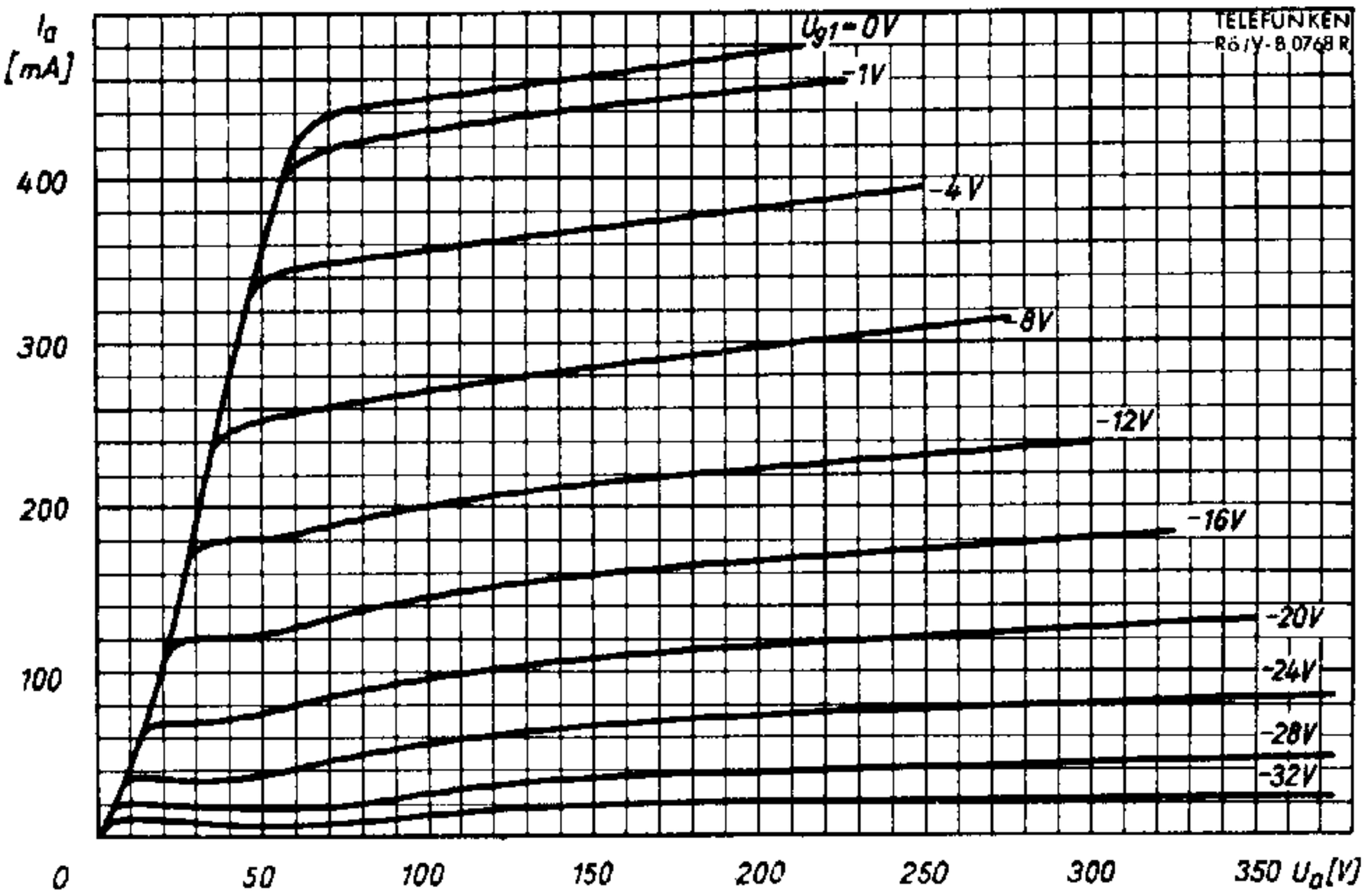
$U_{g3} = 0\ V$

$U_{g2} = 170\ V$

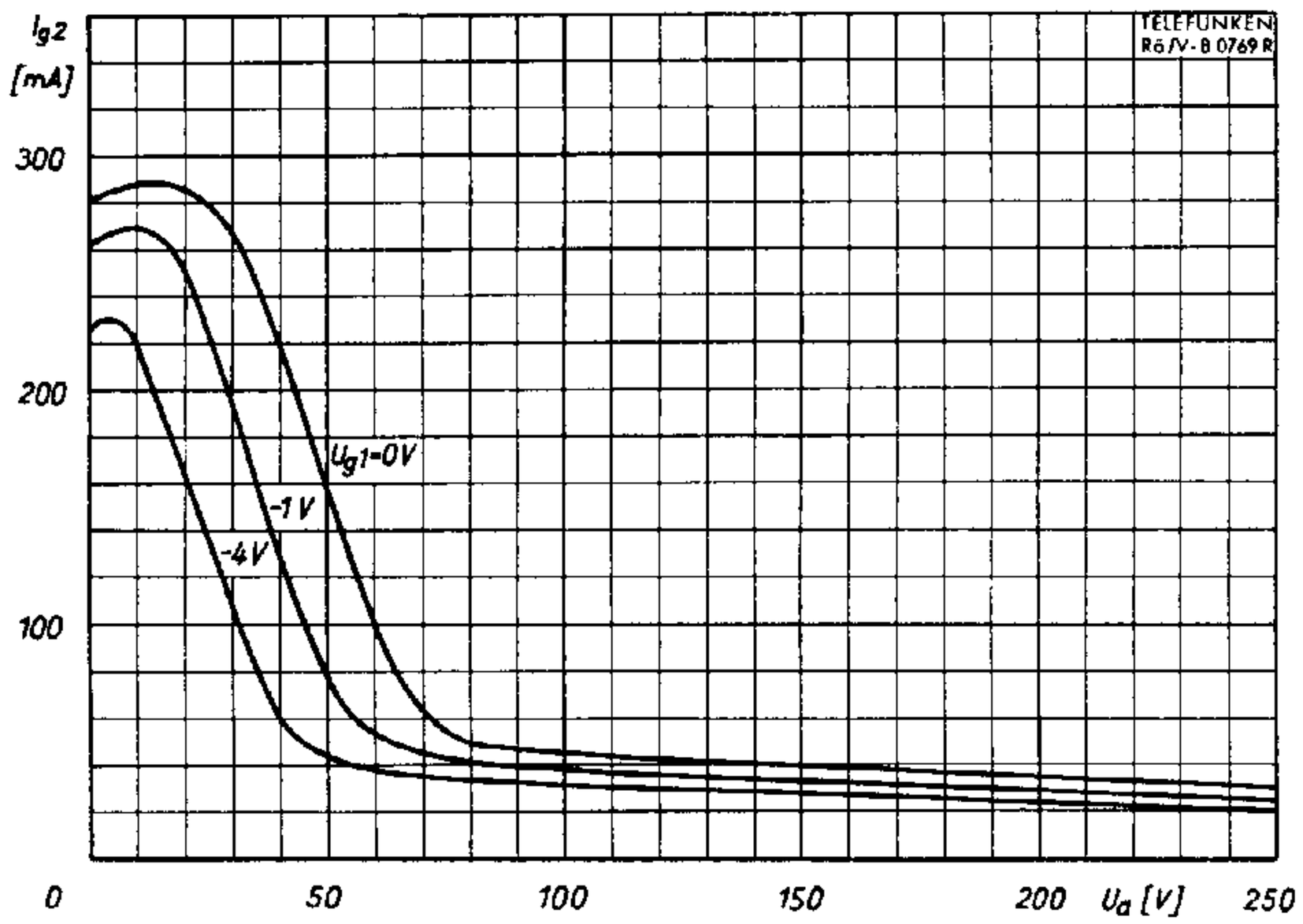
$U_{g1} =$ Parameter

PL 81

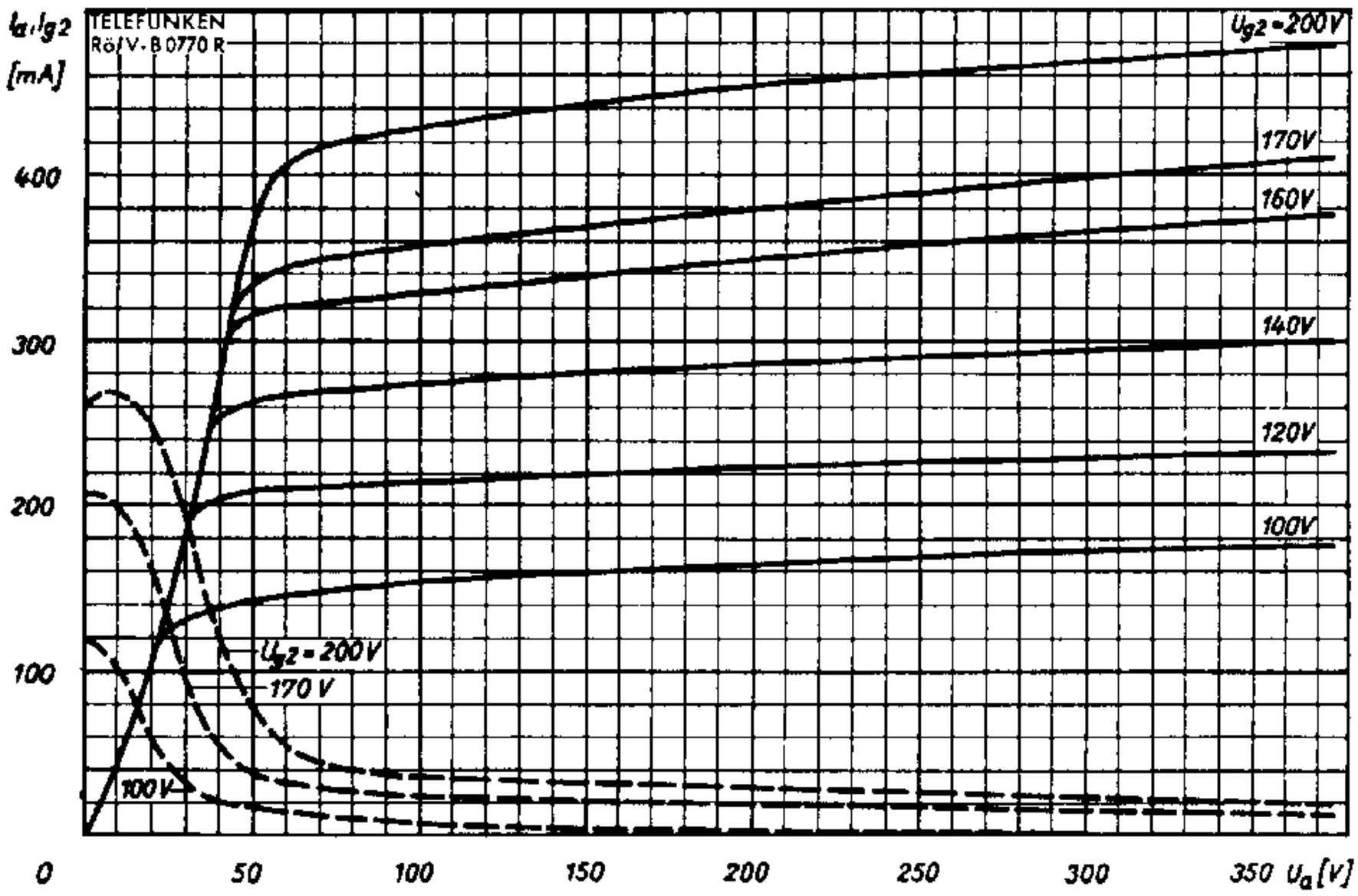
TELEFUNKEN



$I_a = f(U_a)$
$U_{g3} = 0\ V$
$U_{g2} = 200\ V$
$U_{g1} =$ Parameter



$I_{g2} = f(U_a)$
$U_{g3} = 0\ V$
$U_{g2} = 200\ V$
$U_{g1} =$ Parameter



$I_a, I_{g2} = f(U_a)$

$U_{g3} = 0\ V$

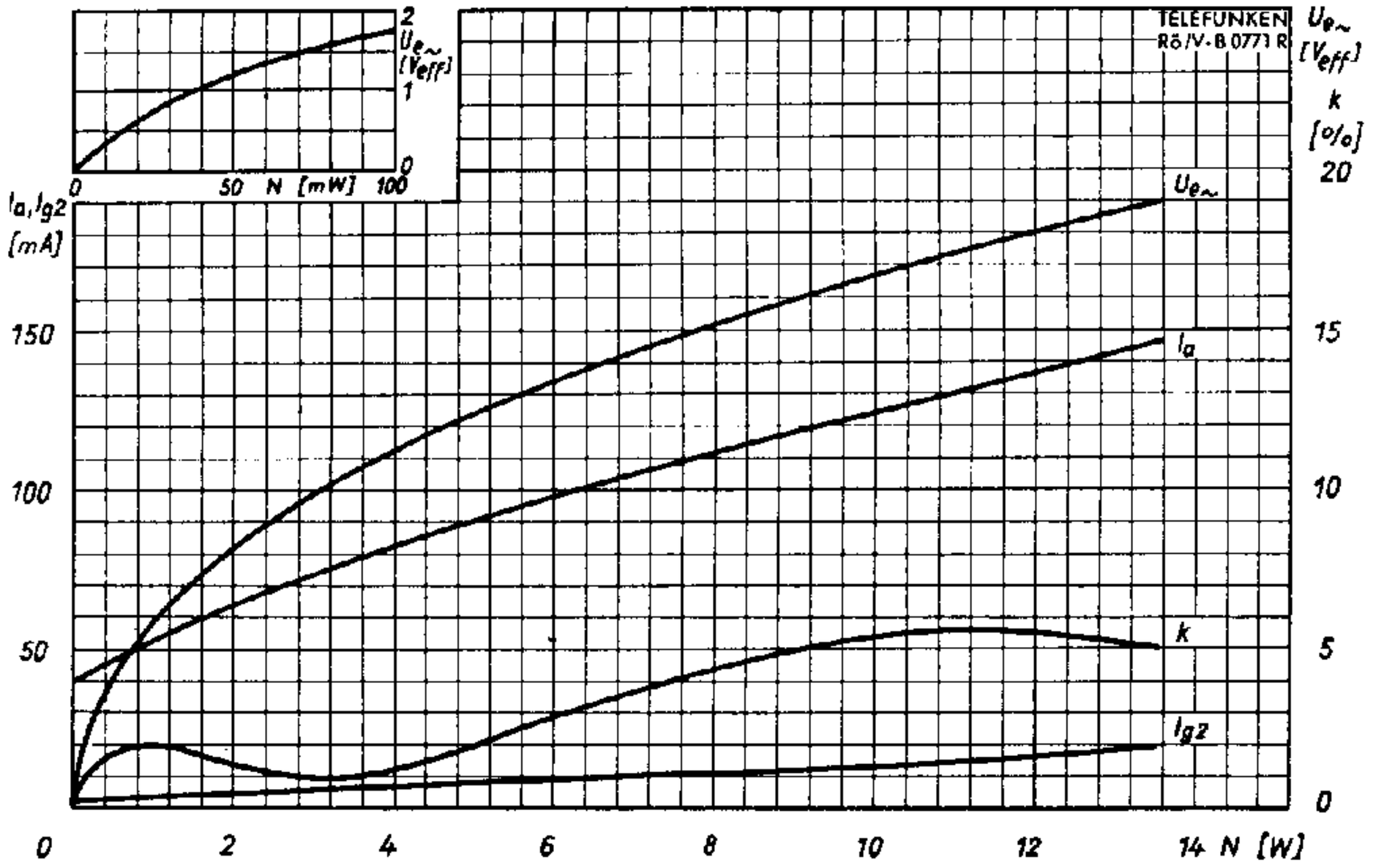
U_{g2} = Parameter

$U_{g1} = -1\ V$

——— I_a - - - - I_{g2}

PL 81

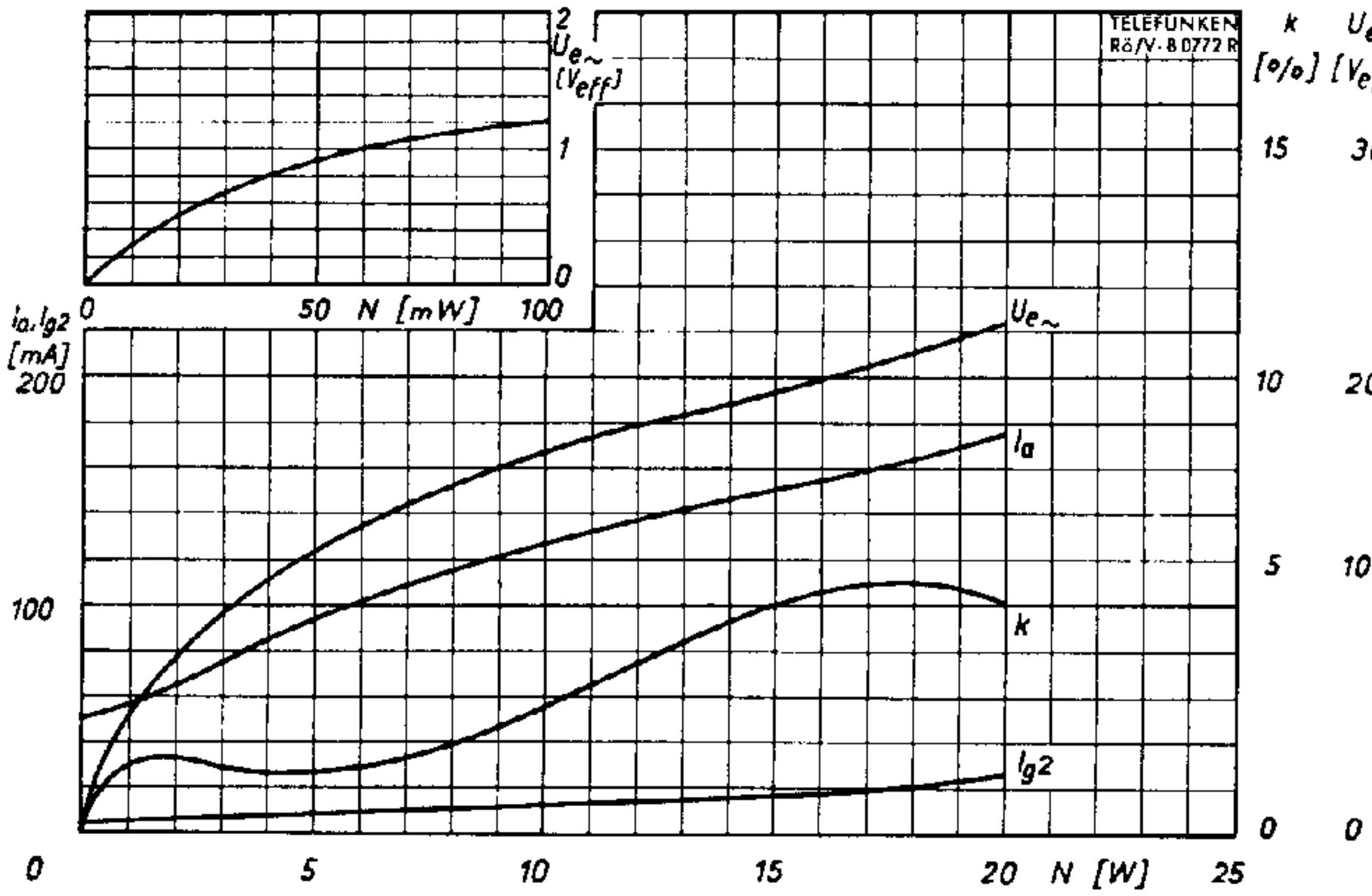
TELEFUNKEN



$I_a, I_{g2}, U_{g1\sim}, k = f(N)$ $\quad R_{g2} = 1\ k\Omega$

$U_b = 170\ V$ $\quad U_{g1} = -27\ V$

$U_{g3} = 0\ V$ $\quad R_{aa} = 2{,}5\ k\Omega$



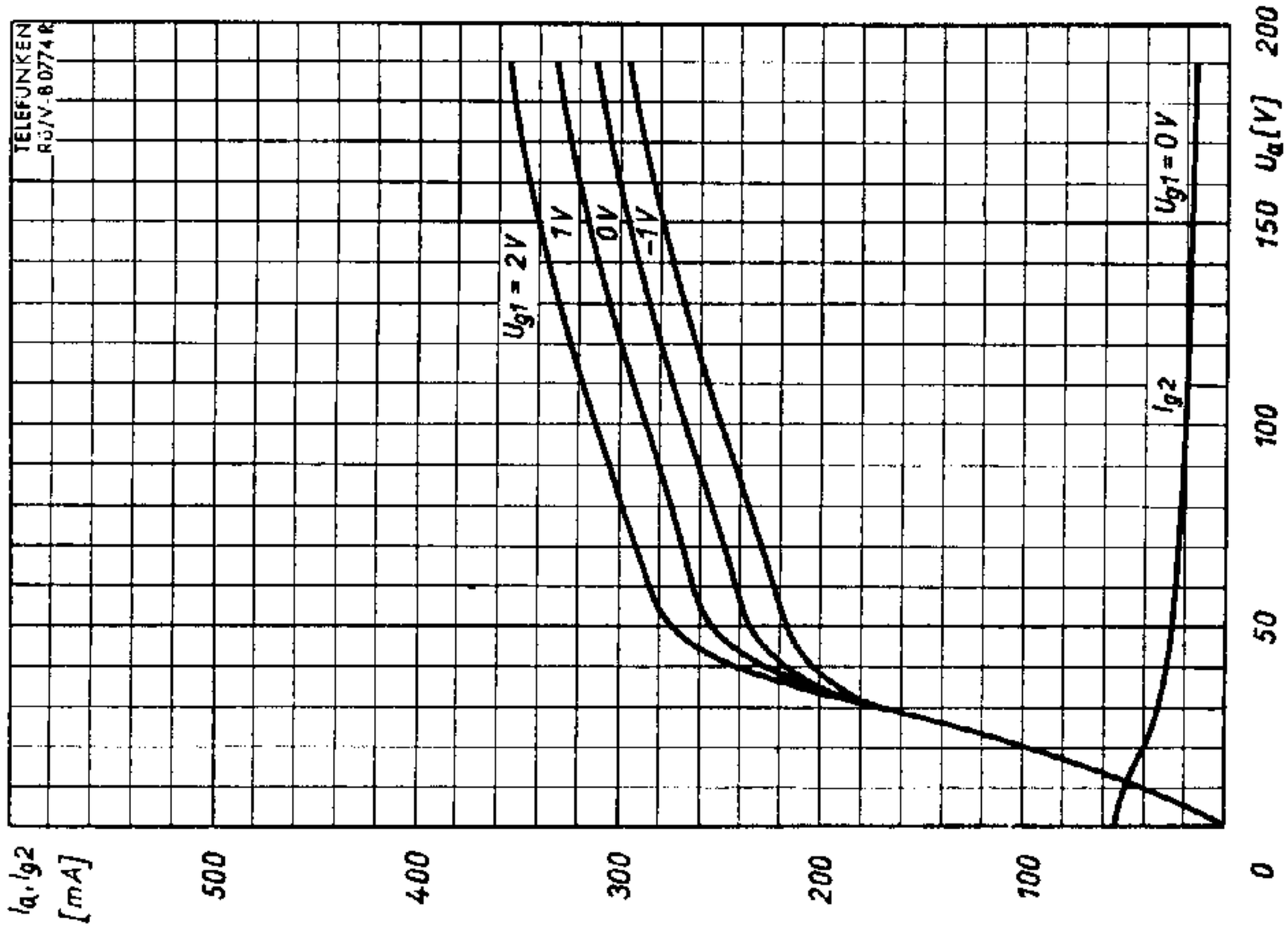
$I_a, I_{g2}, U_{g1\sim}, k = f(N)$ $\quad R_{g2} = 1\ k\Omega$

$U_b = 200\ V$ $\quad U_{g1} = -31{,}5\ V$

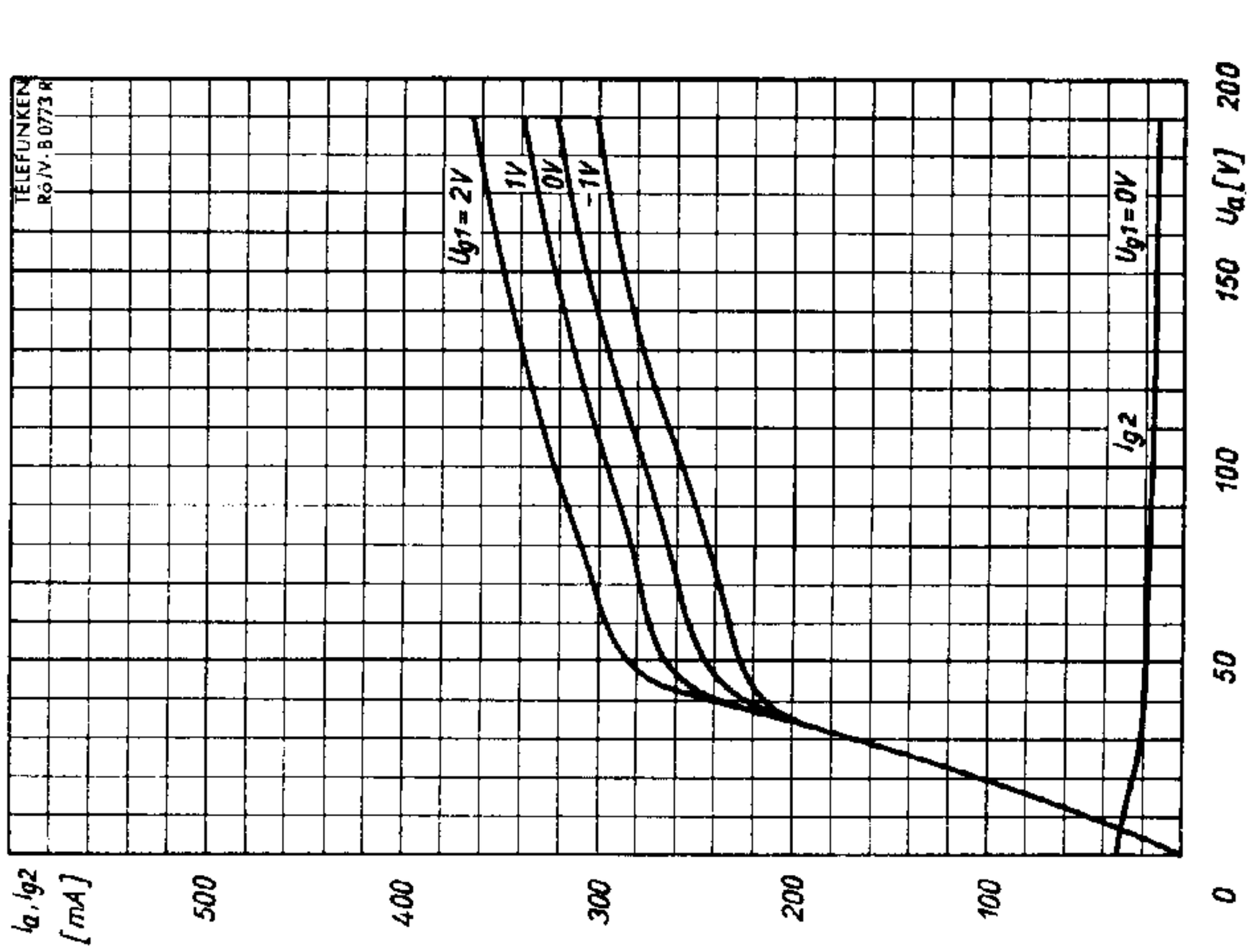
$U_{g3} = 0\ V$ $\quad R_{aa} = 2{,}5\ k\Omega$

2 Röhren, Gegentakt-B-Betrieb

I_a, I_{g2} als Gesamtstrom

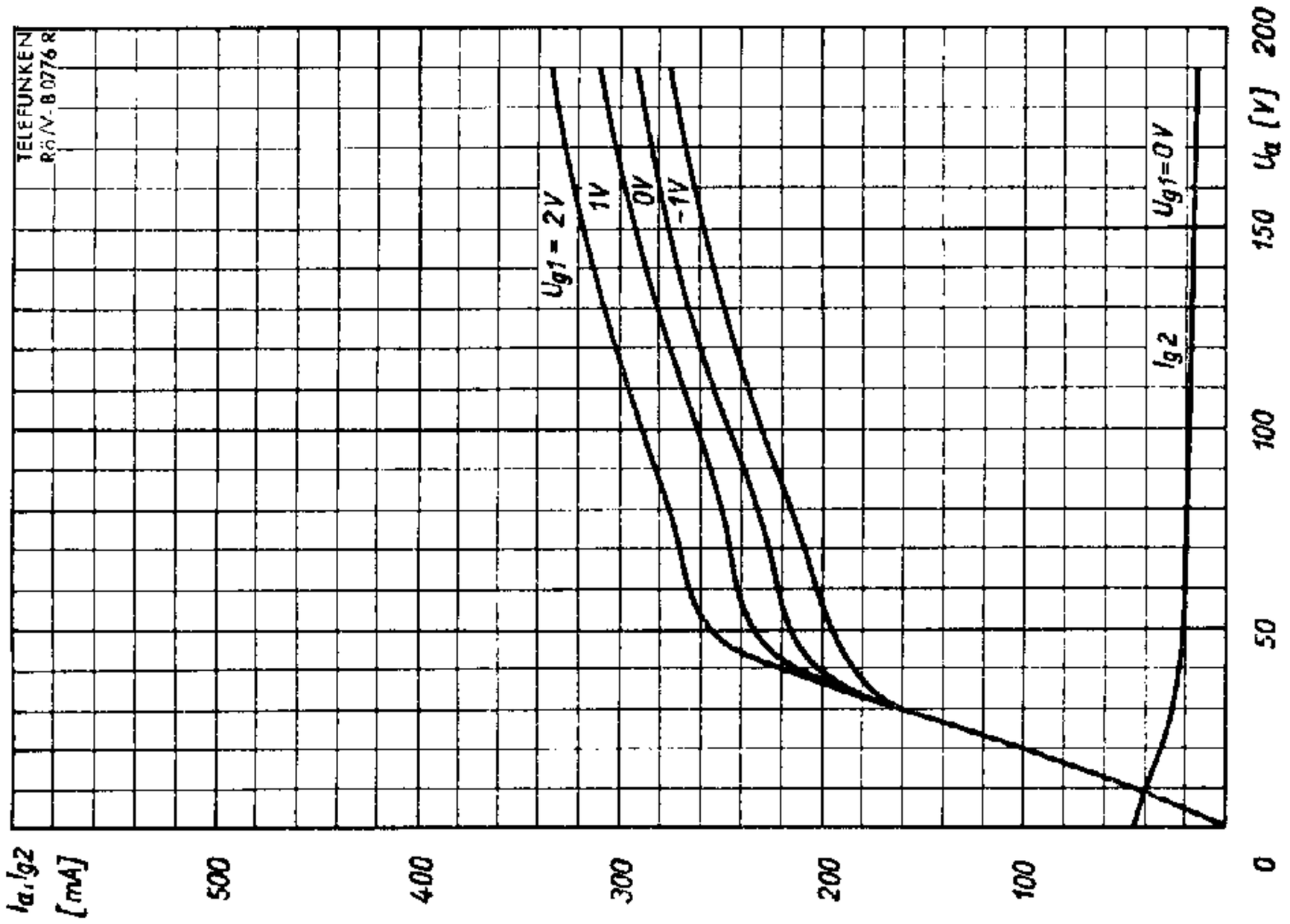


$I_a, I_{g2} = f(U_a)$
$U_{g3} = 0$ V
$U_{bg2} = 190$ V
$R_{g2} = 2{,}5$ kΩ
U_{g1} = Parameter

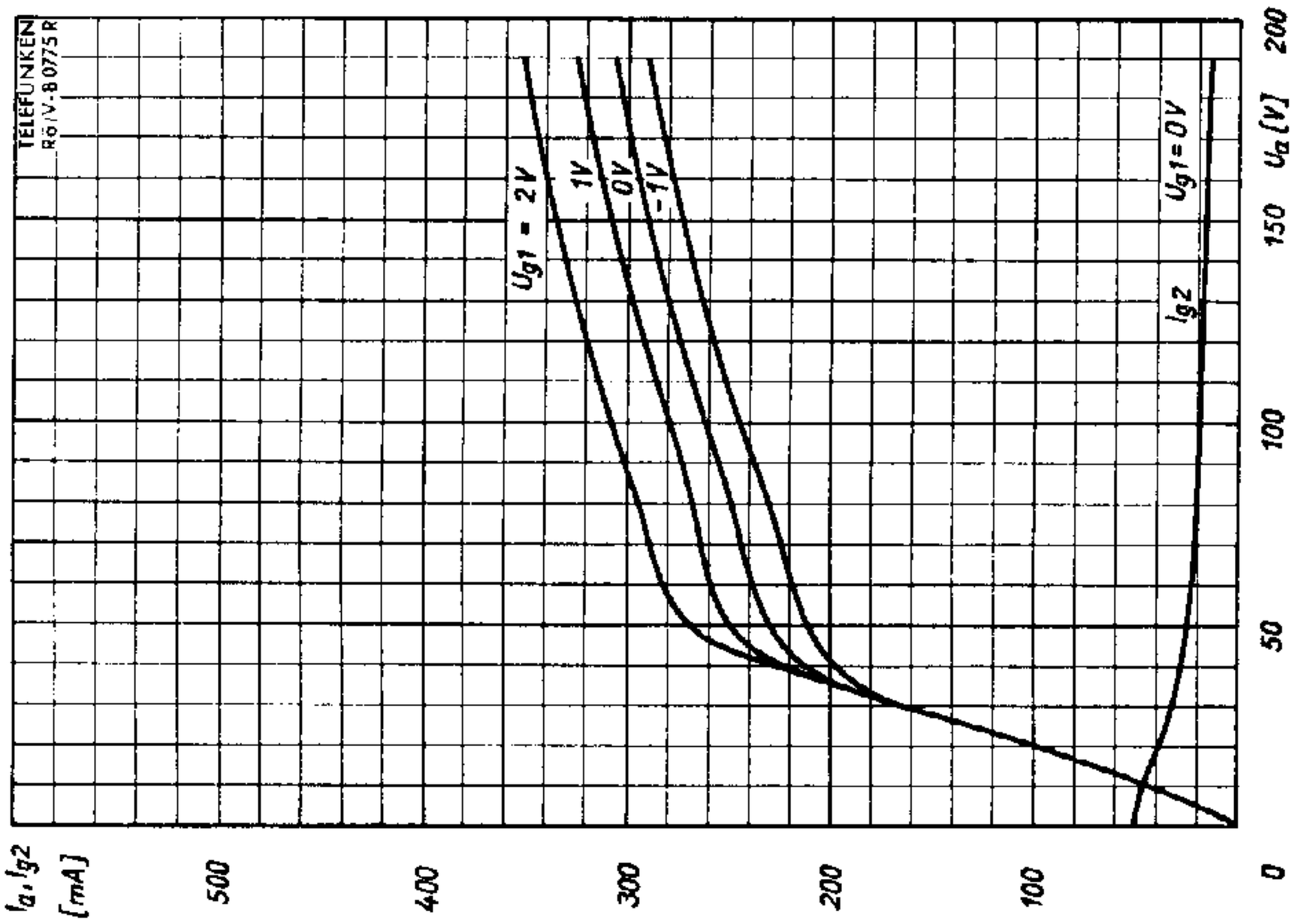


$I_a, I_{g2} = f(U_a)$
$U_{g3} = 0$ V
$U_{bg2} = 190$ V
$R_{g2} = 2{,}2$ kΩ
U_{g1} = Parameter

TELEFUNKEN



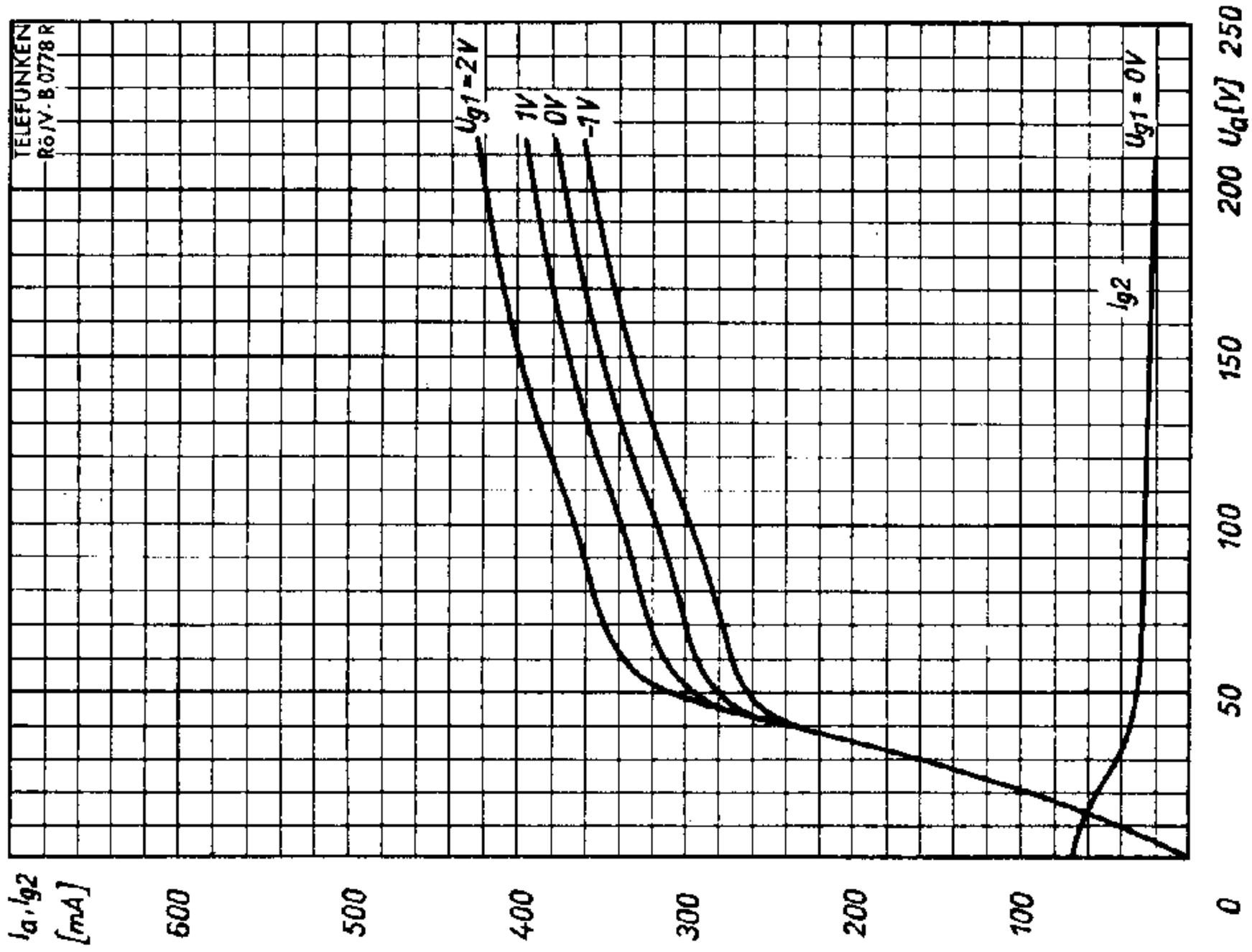
$I_a, I_{g2} = f(U_a)$
$U_{g3} = 0\,V$
$U_{bg2} = 190\,V$
$R_{g2} = 3{,}3\,k\Omega$
U_{g1} = Parameter



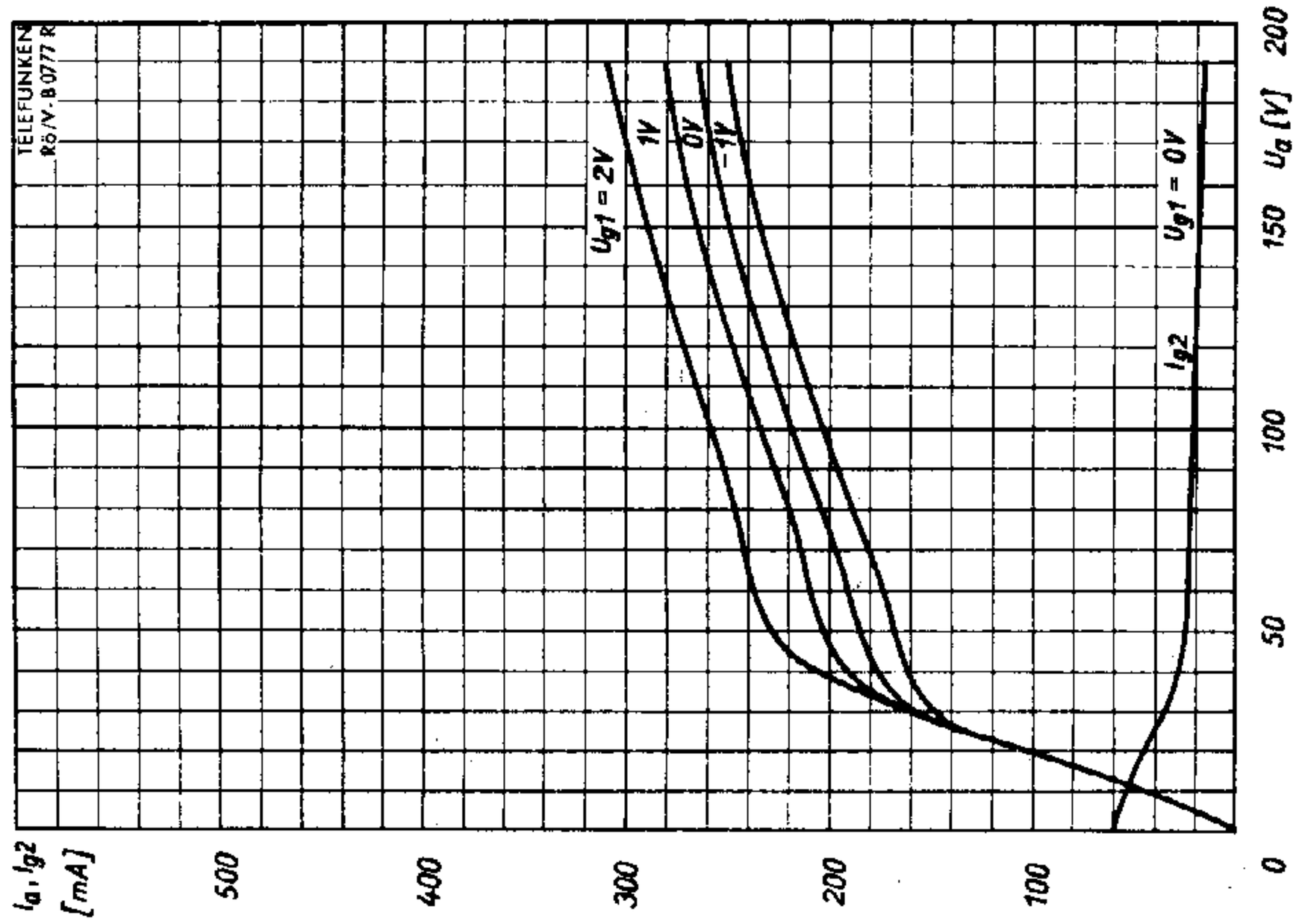
$I_a, I_{g2} = f(U_a)$
$U_{g3} = 0\,V$
$U_{bg2} = 190\,V$
$R_{g2} = 2{,}7\,k\Omega$
U_{g1} = Parameter

TELEFUNKEN

PL 81



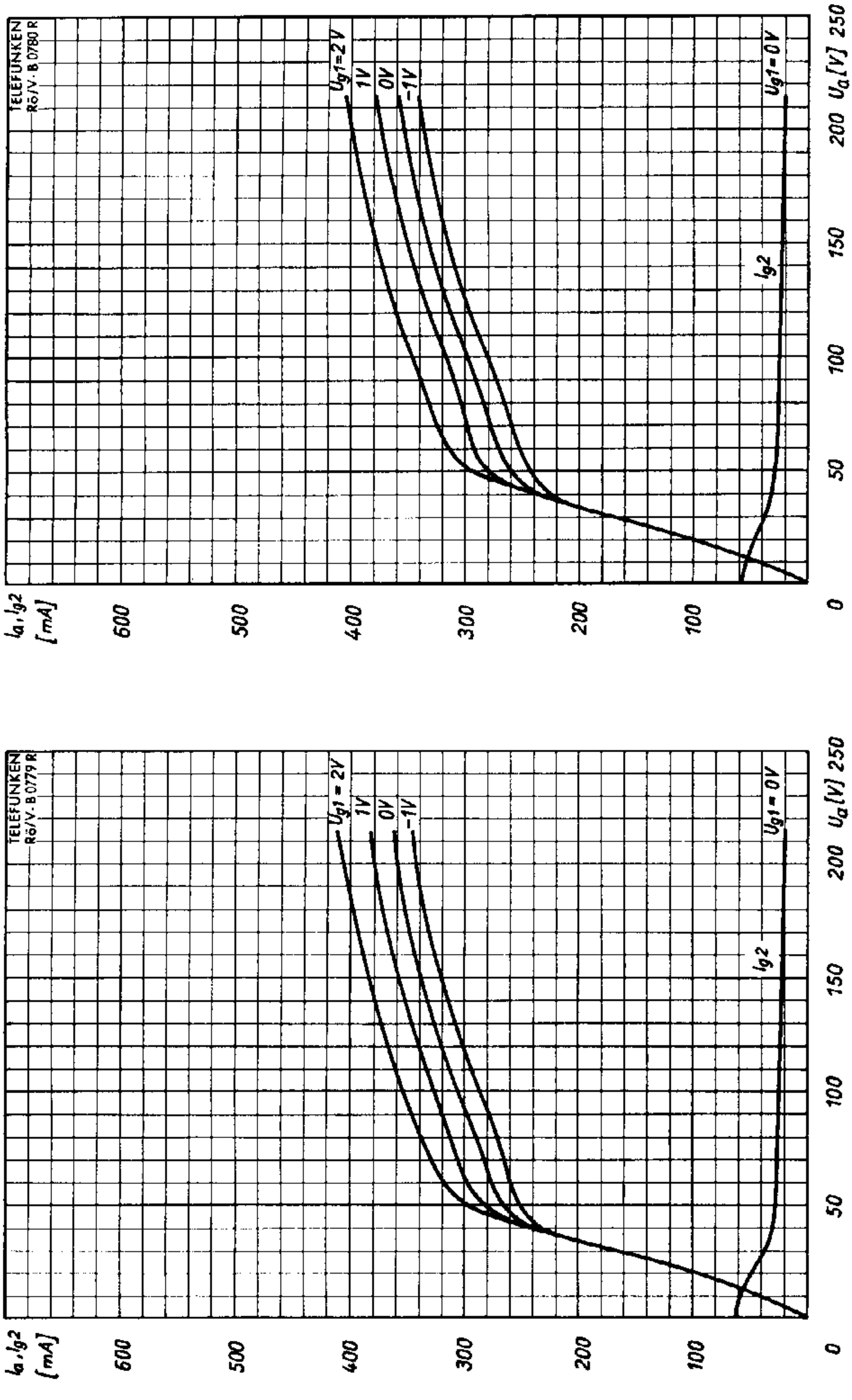
I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 215 V
R_{g2} = 2,2 kΩ
U_{g1} = Parameter

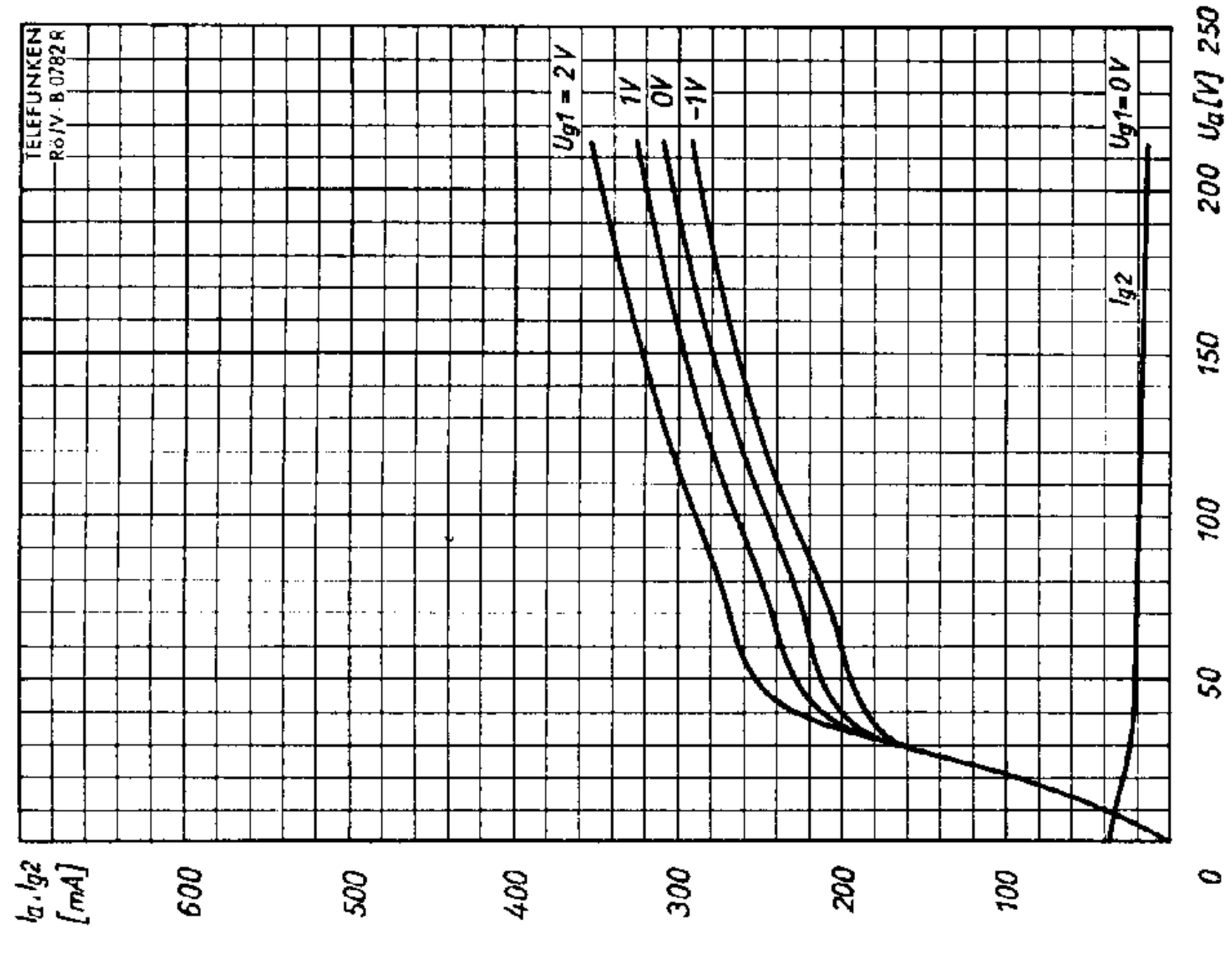


I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 190 V
R_{g2} = 4,7 kΩ
U_{g1} = Parameter

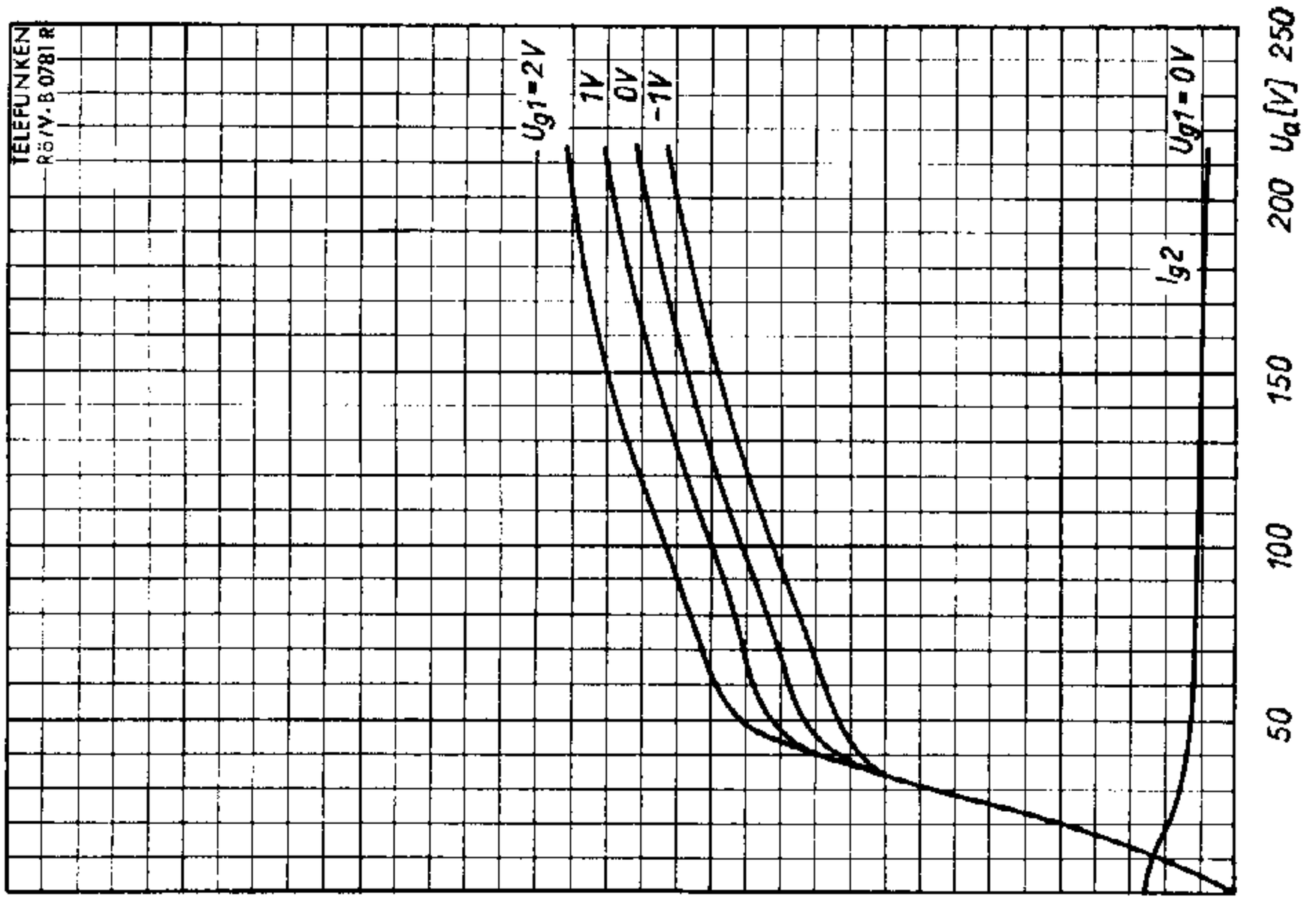
PL 81

TELEFUNKEN





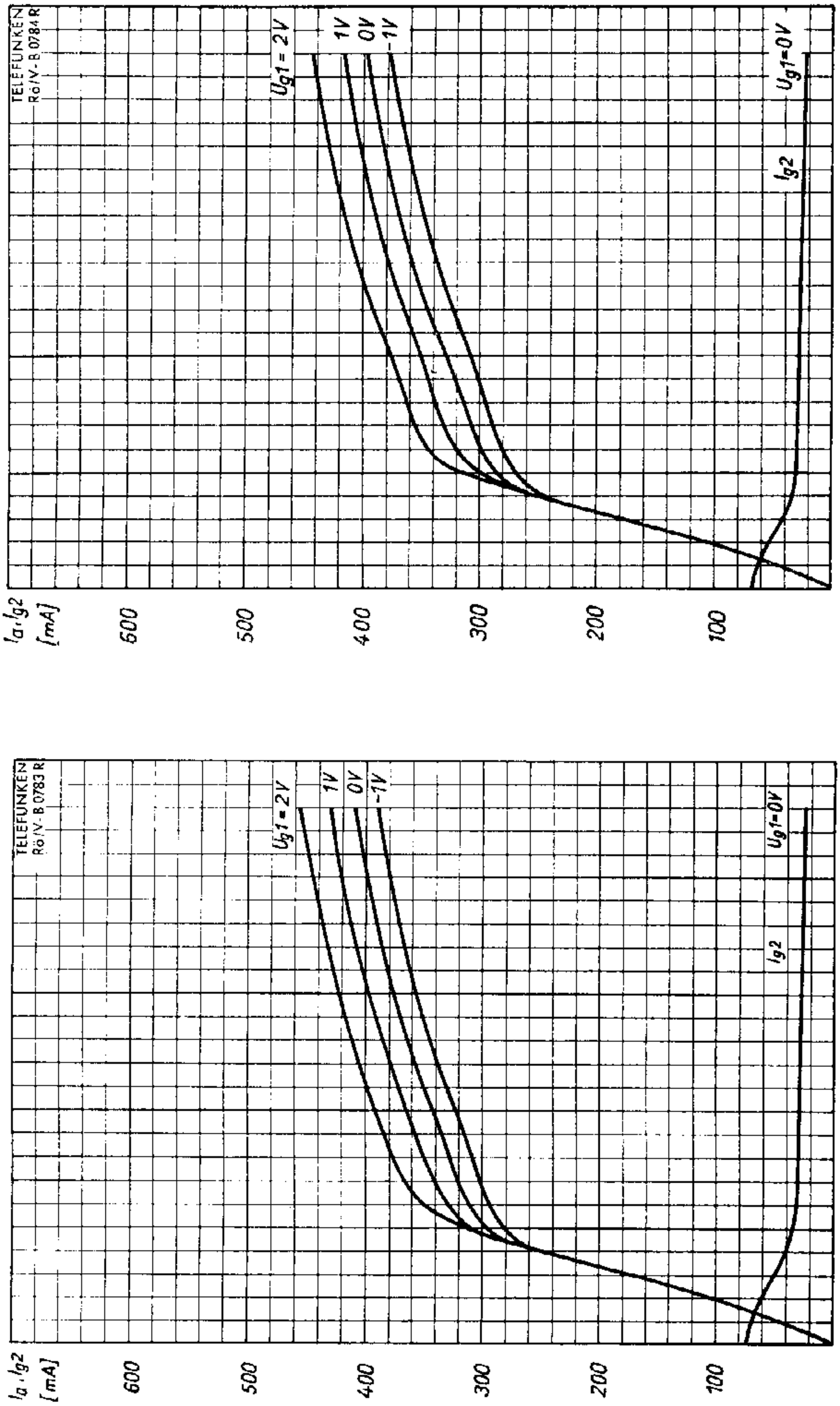
I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 215 V
R_{g2} = 4,7 kΩ
U_{g1} = Parameter

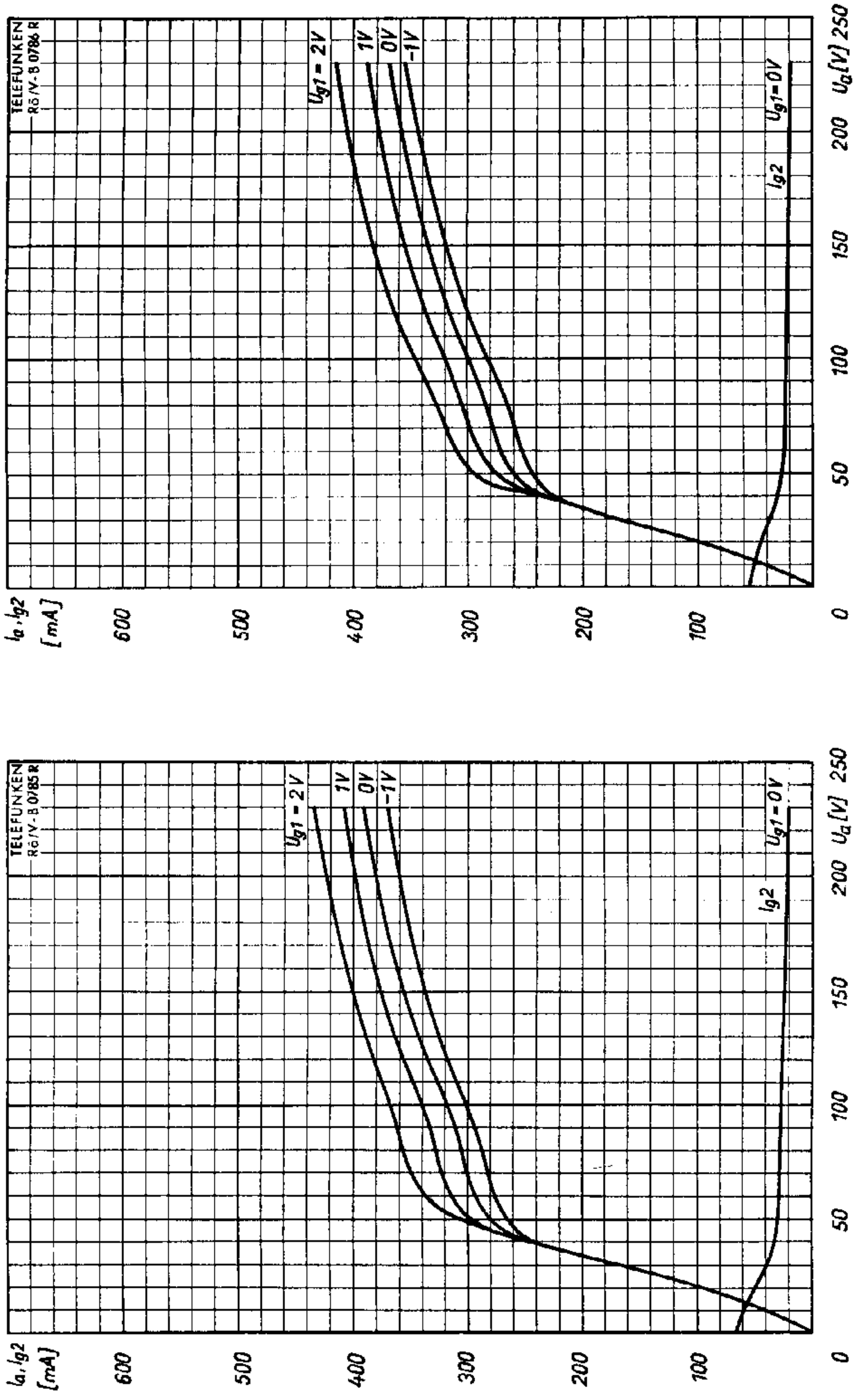


I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 215 V
R_{g2} = 3,3 kΩ
U_{g1} = Parameter

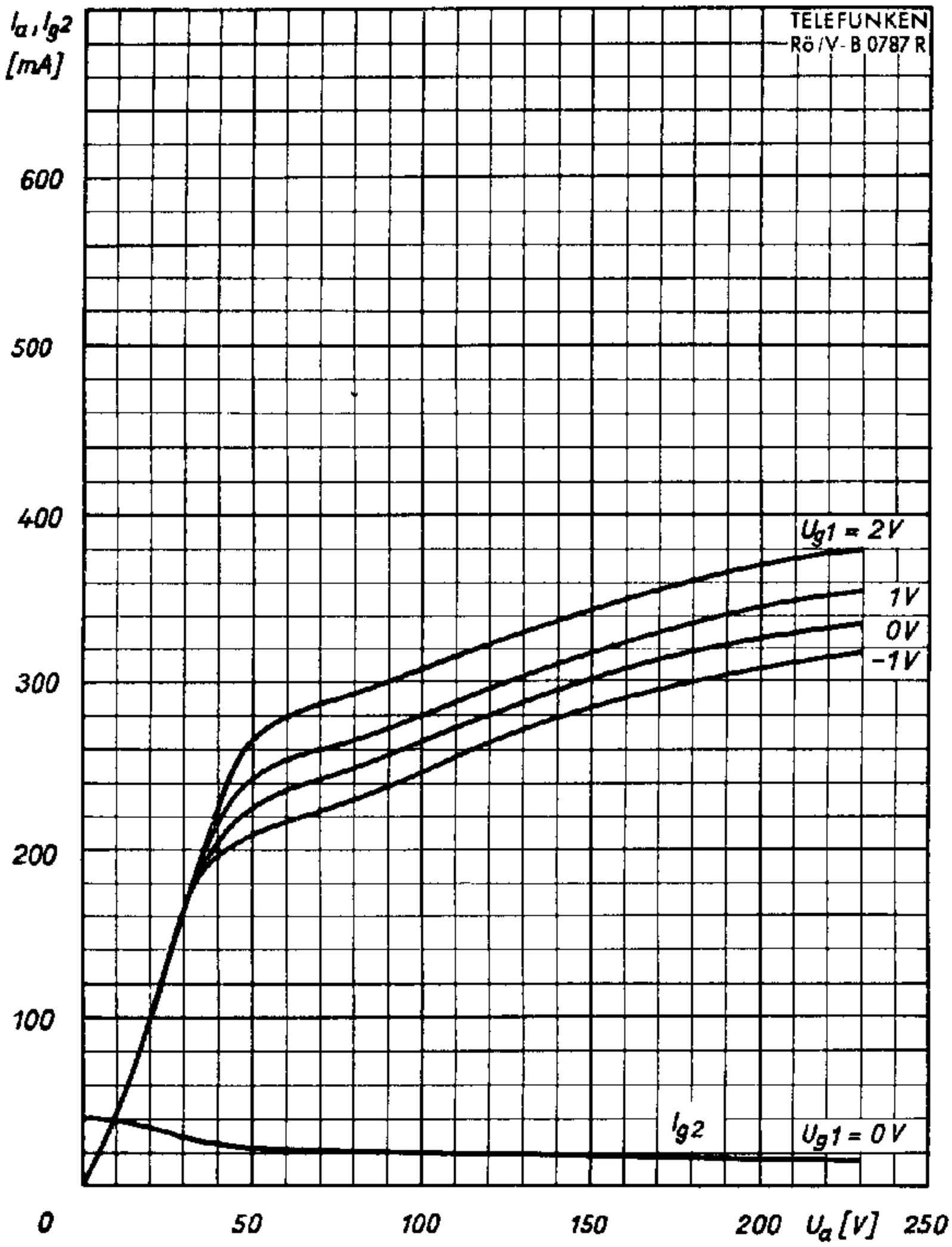
PL 81

TELEFUNKEN




TELEFUNKEN
RÖ/V-B 0786 R
U_{g1} = 2V
1V
0V
-1V
U_{g1}=0V
I_{g2}
I_a, I_{g2} [mA]
600
500
400
300
200
100
0
50
100
150
200
U_a [V] 250
I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 230 V
R_{g2} = 3,3 kΩ
U_{g1} = Parameter
TELEFUNKEN
RÖ/V-B 0785 R
U_{g1} = 2V
1V
0V
-1V
U_{g1}=0V
I_{g2}
I_a, I_{g2} [mA]
600
500
400
300
200
100
0
50
100
150
200
U_a [V] 250
I_a, I_{g2} = f (U_a)
U_{g3} = 0 V
U_{bg2} = 230 V
R_{g2} = 2,7 kΩ
U_{g1} = Parameter

TELEFUNKEN



$I_a, I_{g2} = f(U_a)$

$U_{g3} = 0\ V$

$U_{bg2} = 230\ V$

$R_{g2} = 4{,}7\ k\Omega$

U_{g1} = Parameter