Netzröhre für GW-Heizung
indirekt geheizt
Serienspeisung

DC-AC-heating
indirectly heated
connected in series

TELEFUNKEN

PL 36

Leistungspentode für Horizontal-Ablenkung

Power Pentode for Horizontal-Deflection

I_f	**300**	mA
U_f	25	V

Normierte Anheizzeit
Normalized heating-up time

Meßwerte · Measuring values

U_a		**100**	V
U_{g2}		**100**	V
U_{g1}		−8,2	V
I_a		**100**	mA
I_{g2}		7	mA
S		14	mA/V
R_i		5	kΩ
$\mu_{g2/g1}$		5,6	
U_{g1} [1]	max.	−120	V

für I_k = 60 µA
U_{asp} = 7 kV
U_{g2} = 190 V
Z_{g1} ≦ 1 kΩ

Optimale Spitzenwerte des Anodenstromes bei Anwendung als Endröhre für Horizontalablenkung [2].

Die Kennlinien auf den Blättern 040259 ... 060259 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 [2].

Average values of new tubes are indicated by the curves of data sheets No. 040259 ... 060259. 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 by 25 %.

[1] u. [2] siehe Rückseite · see reverse

Grenzwerte · Maximum ratings

U_{ao}	550	V
U_a	250	V
U_{asp} 1)	7000	V
U_{asp} 1)	−1500	V
U_{g2o}	550	V
U_{g2}	250	V
U_{g1sp} 1)	−1000	V
N_a, N_{g2} 3), N_a+N_{g2}	siehe Bild 1 · see fig. 1	
I_k	200	mA
R_{g1} 4)	0,5	MΩ
$U_{f/k\,eff}$	250	V
$U_{f/k}$ k pos	250	V
$U_{f/k}$ k neg	200	V
$R_{f/k}$	20	kΩ

Kapazitäten · Capacitances

c_e	ca.	19	pF
c_a	ca.	10	pF
$c_{g1/a}$	<	1,1	pF

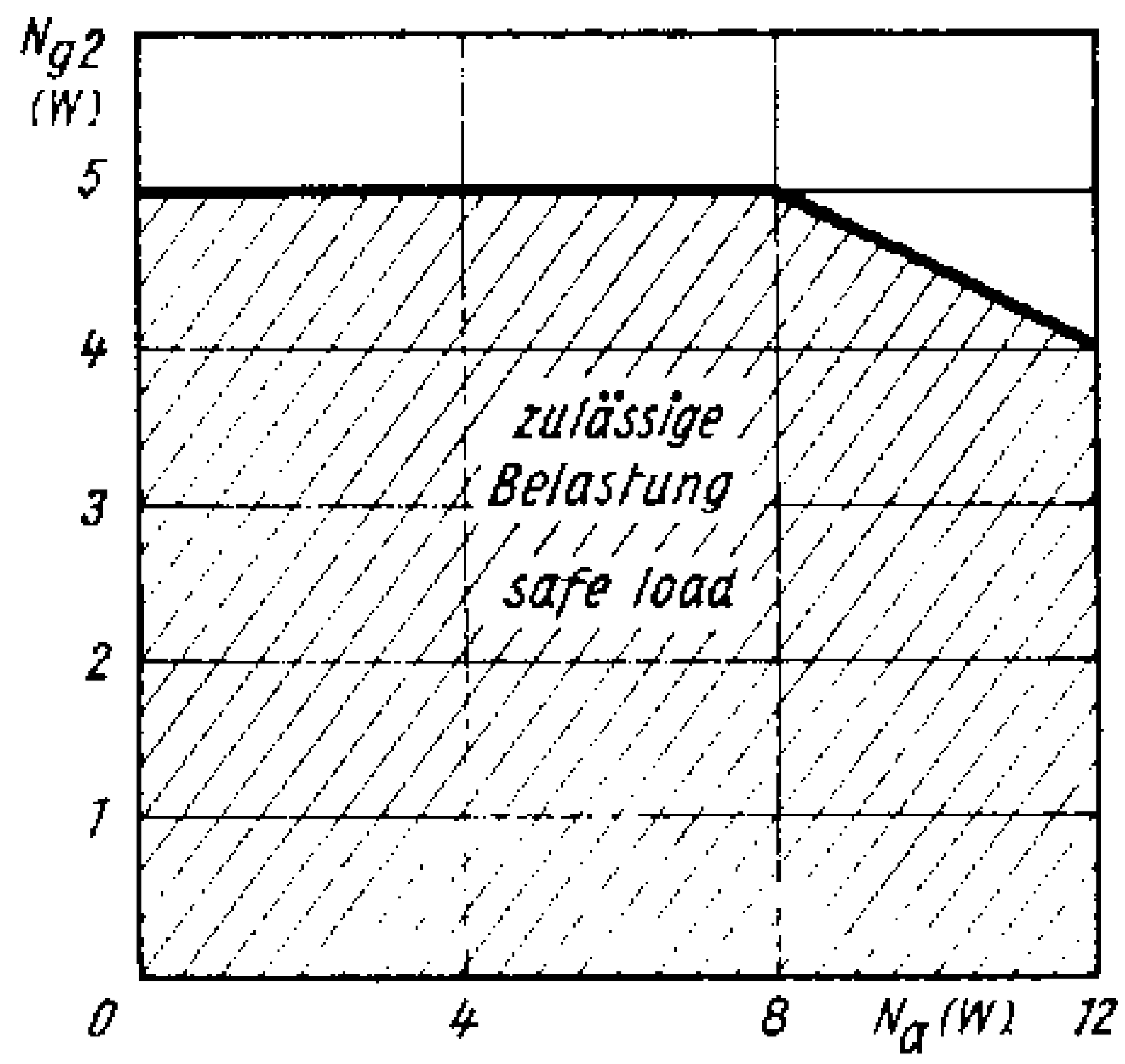


Bild 1

$N_{g2} = f(N_a)$

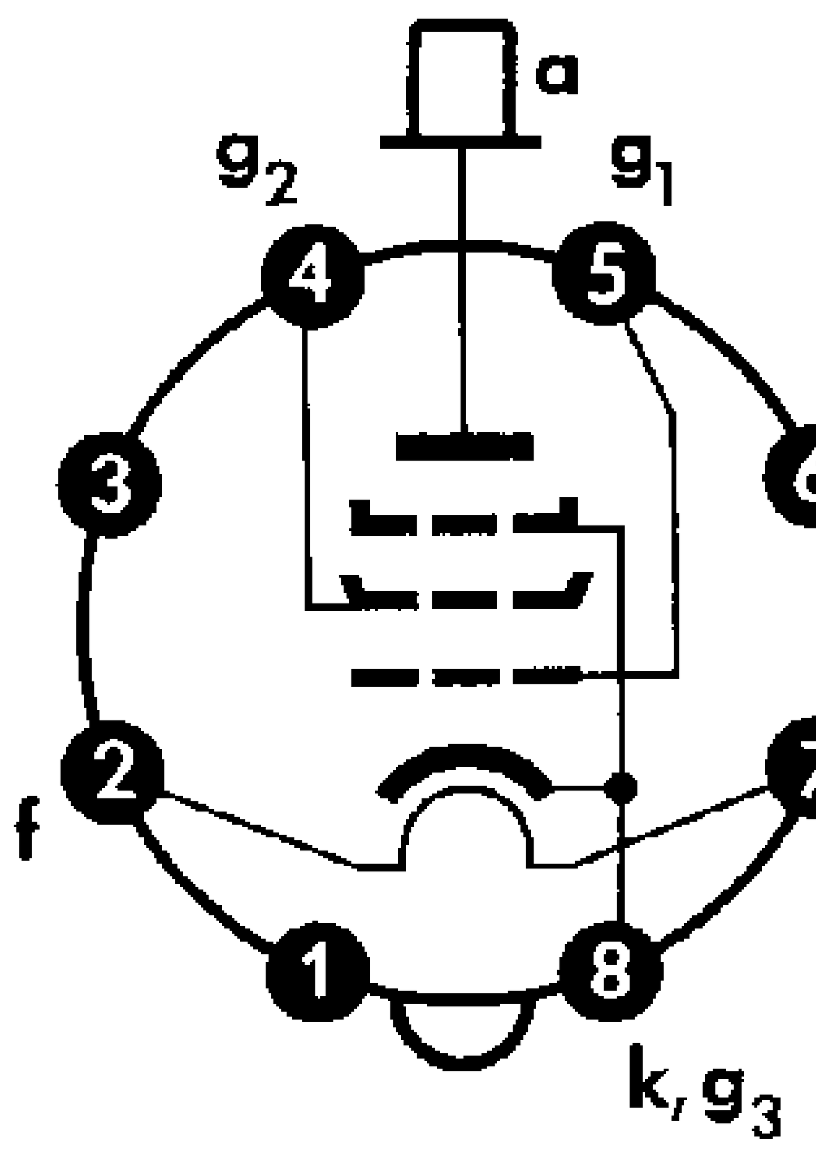
1) Als Endröhre für die horizontale Ablenkung bei Impulsdauer max. 22% einer Periode, t_{max} = 18 µs.
As power tube for horizontal deflection at impulse duration max. 22% per period, t_{max} = 18 µs.

2) In allen Schaltungen für die horizontale Ablenkung ist $R_{g2} \geq$ 1,5 kΩ zu wählen. Beim Betrieb der Röhre unterhalb des Knies sollte zum Vermeiden von Barkhausen-Schwingungen der Schirmgitter-Widerstand nicht kleiner als 2,2 kΩ gewählt werden.
For all circuits for horizontal deflection select $R_{g2} \geq$ 1.5 kΩ. When driving the tube below the knee of anode current vs, anode voltage characteristic a higher value for R_{g2} than 2.2 kΩ should be choosen to avoid Barkhausen-Kurz-oscillations.

3) Während der Anheizzeit der Boosterdiode $N_{g2\,max}$ = 7 W.
During booster diode heating-up period $N_{g2\,max}$ = 7 W.

4) Als Endröhre für die horizontale Ablenkung unter Verwendung von Stabilisierungsschaltungen mit Regelung über das Steuergitter ist R_{g1} = max. 2,2 MΩ.
R_{g1} should be limited to 2.2 MΩ when DC-control-voltage is applied to grid 1 for stabilizing purposes.

Sockelschaltbild
Basing diagram

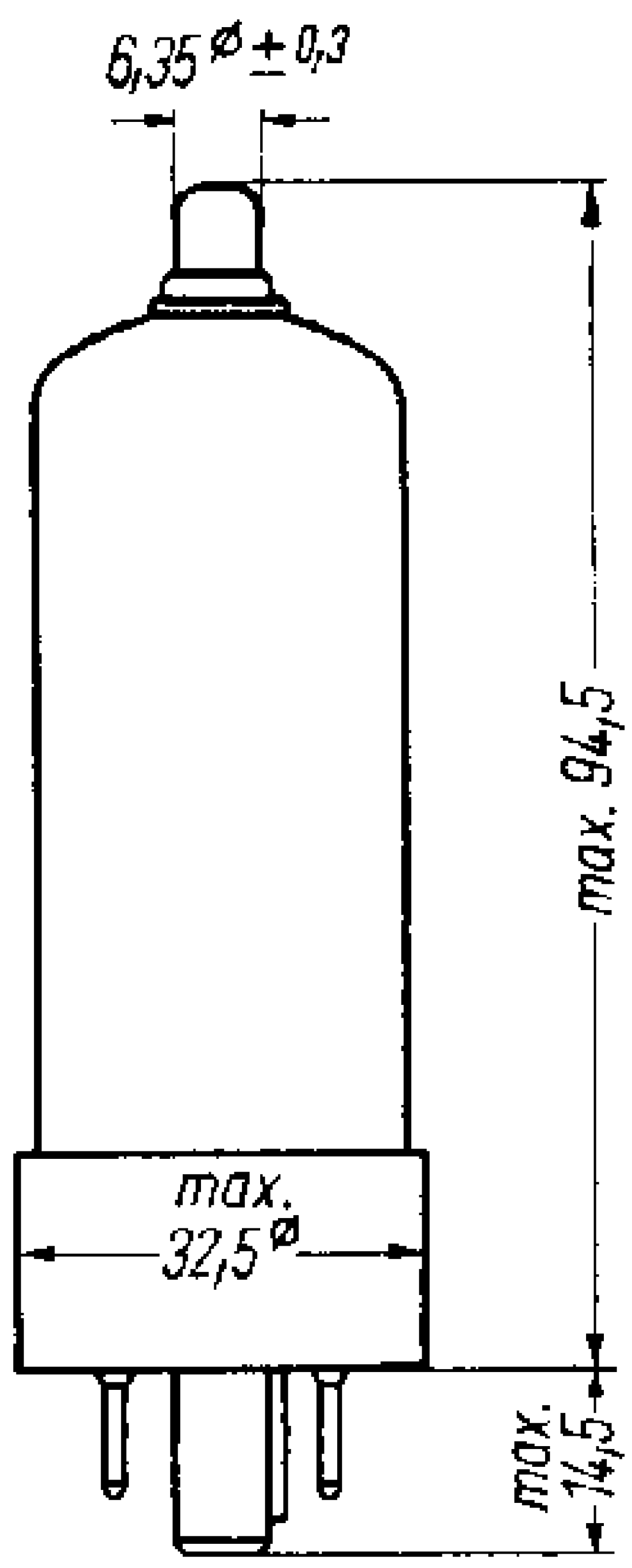


Oktal

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

Free pins not to be connected externally.

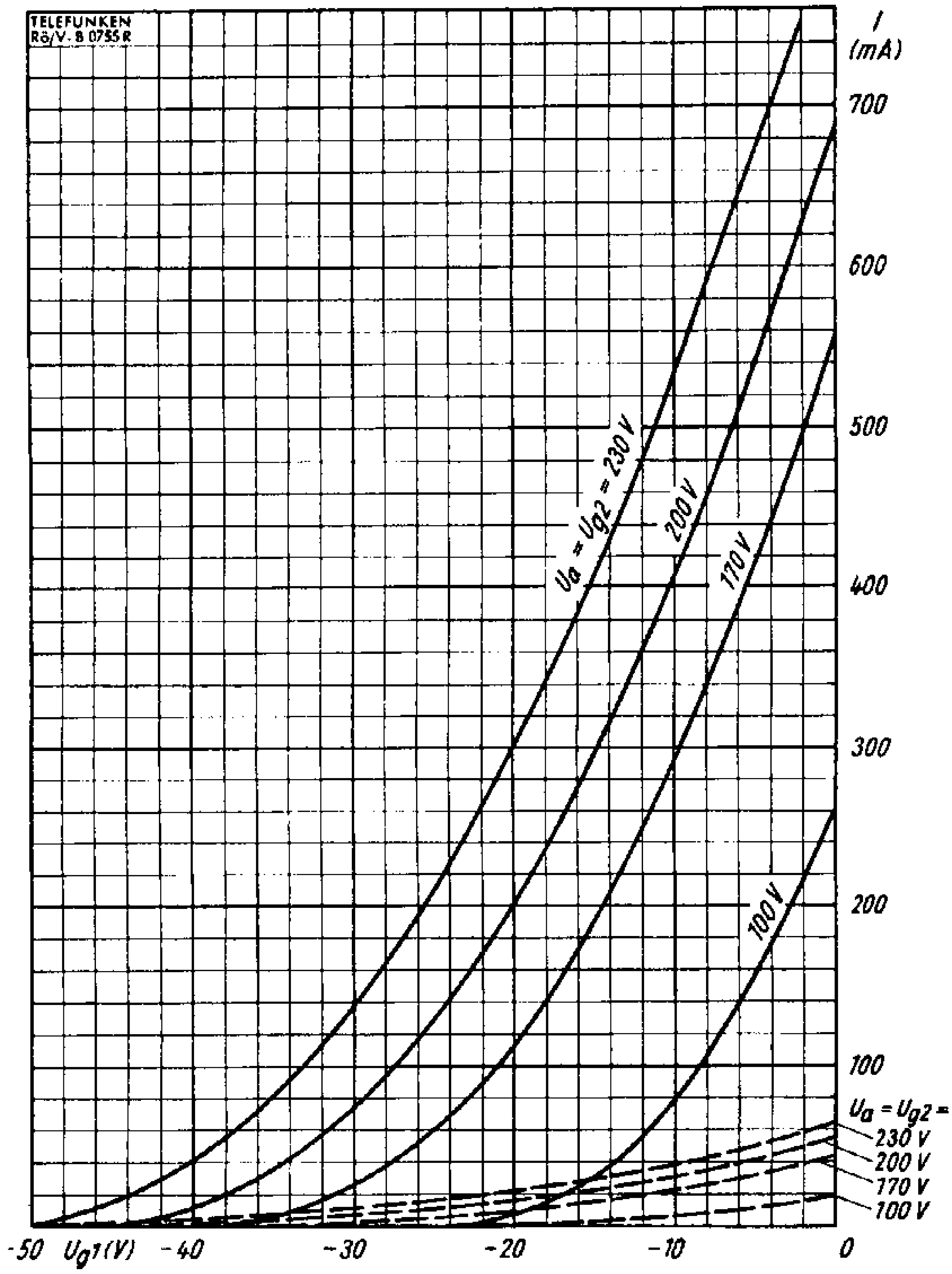
Abmessungen in mm
Dimensions



Gewicht · Weight
max. 40 g

Wenn notwendig, muß gegen Herausfallen der Röhre aus der Fassung Vorsorge getroffen werden.
If necessary special precautions must be taken to prevent the tube from becoming dislodged from the socket.

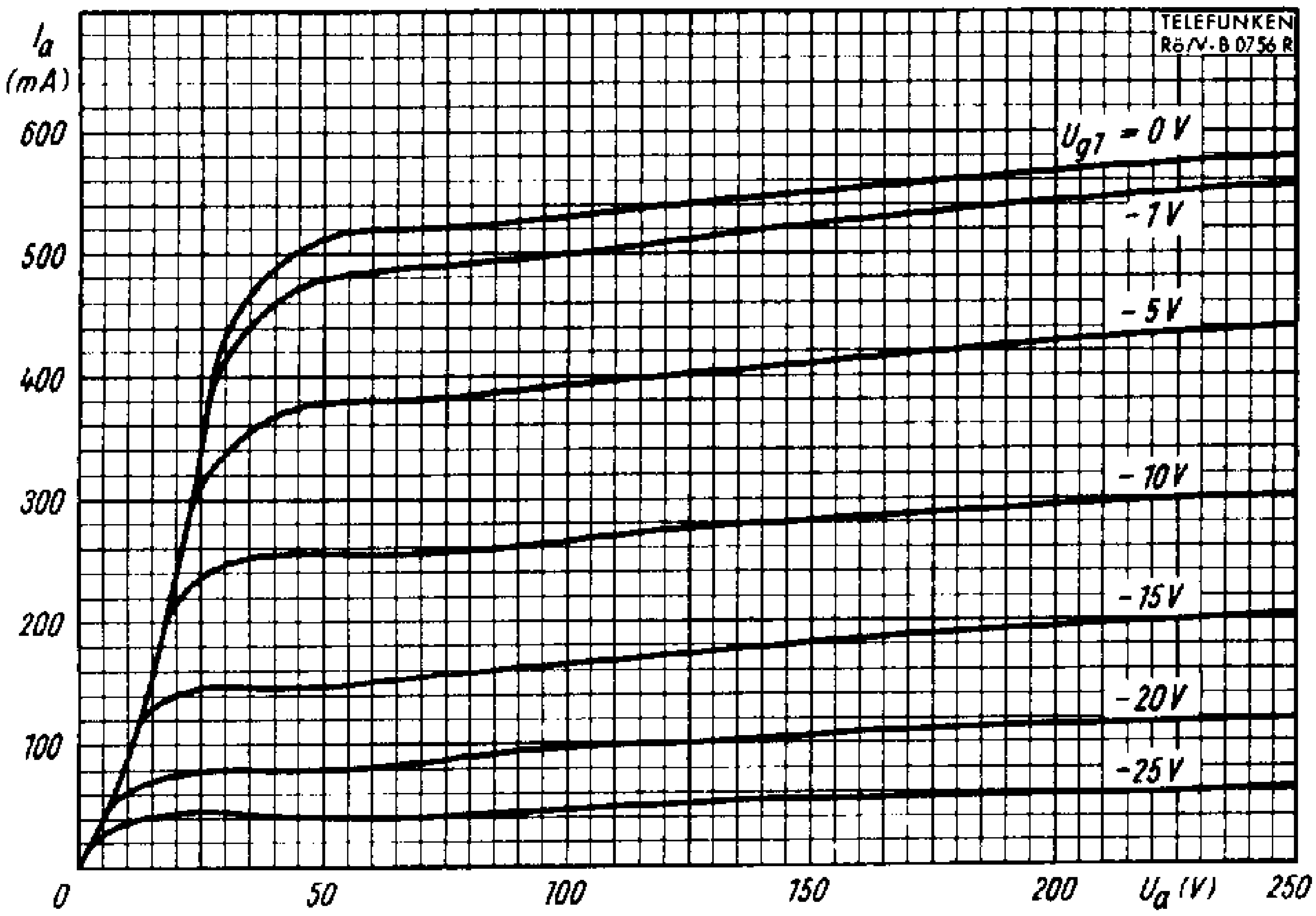
TELEFUNKEN



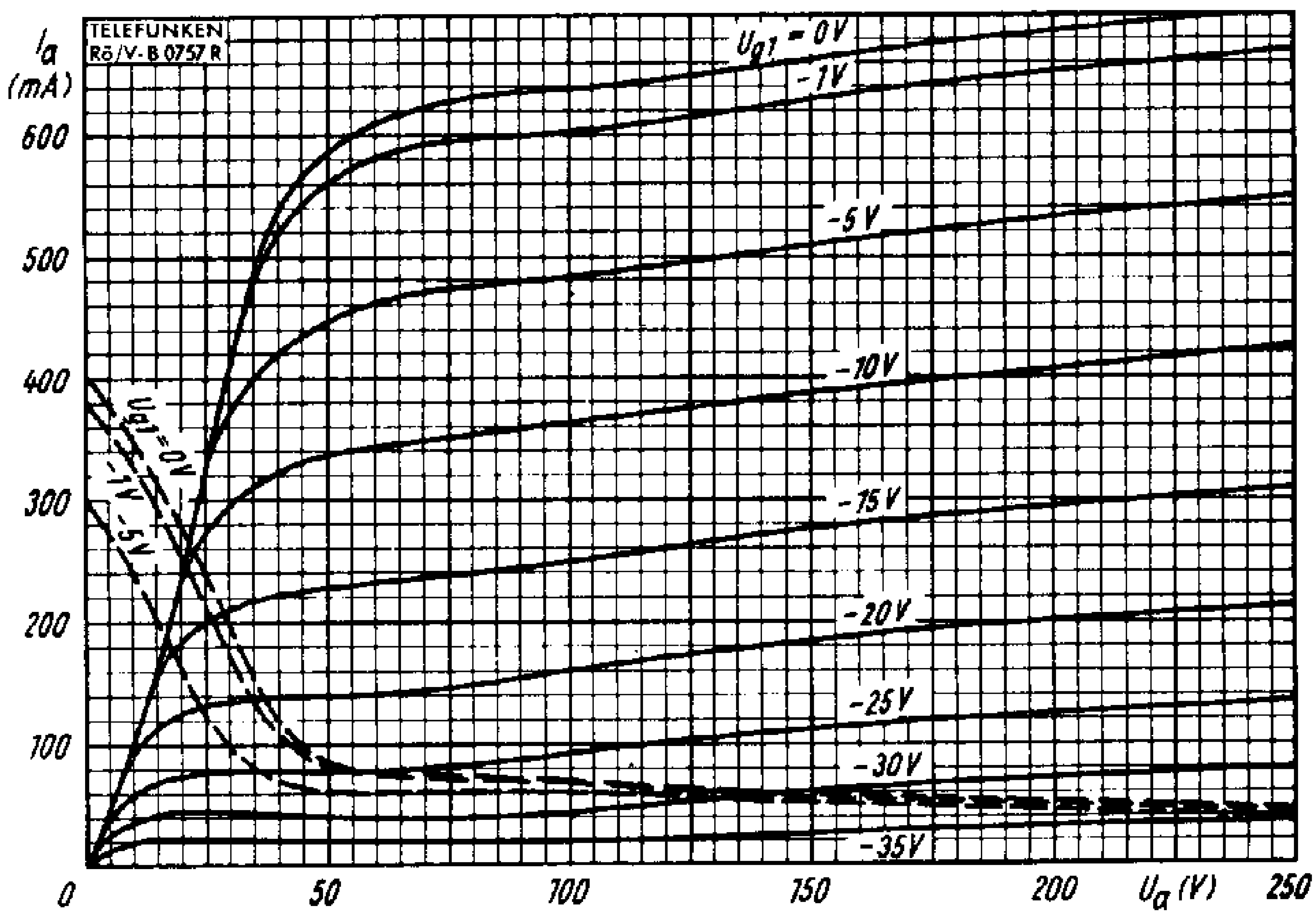
$I_a, I_{g2} = f(U_{g1})$

$U_a = U_{g2} =$ Parameter

——— I_a - - - - I_{g2}



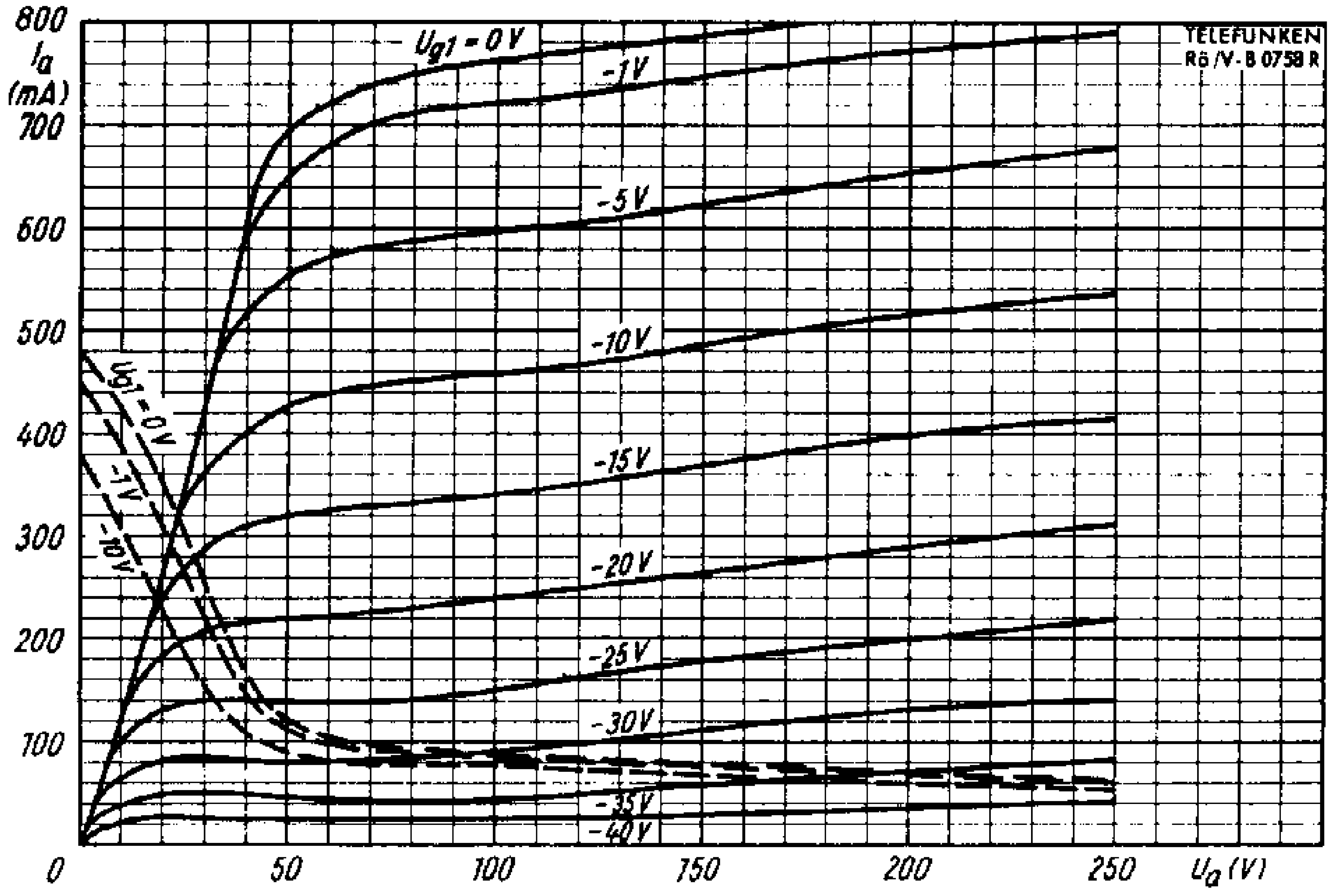
$I_a = f(U_a)$
$U_{g2} = 170$ V
U_{g1} = Parameter



$I_a, I_{g2} = f(U_a)$
$U_{g2} = 200$ V
U_{g1} = Parameter

——— I_a ---- I_{g2}

TELEFUNKEN

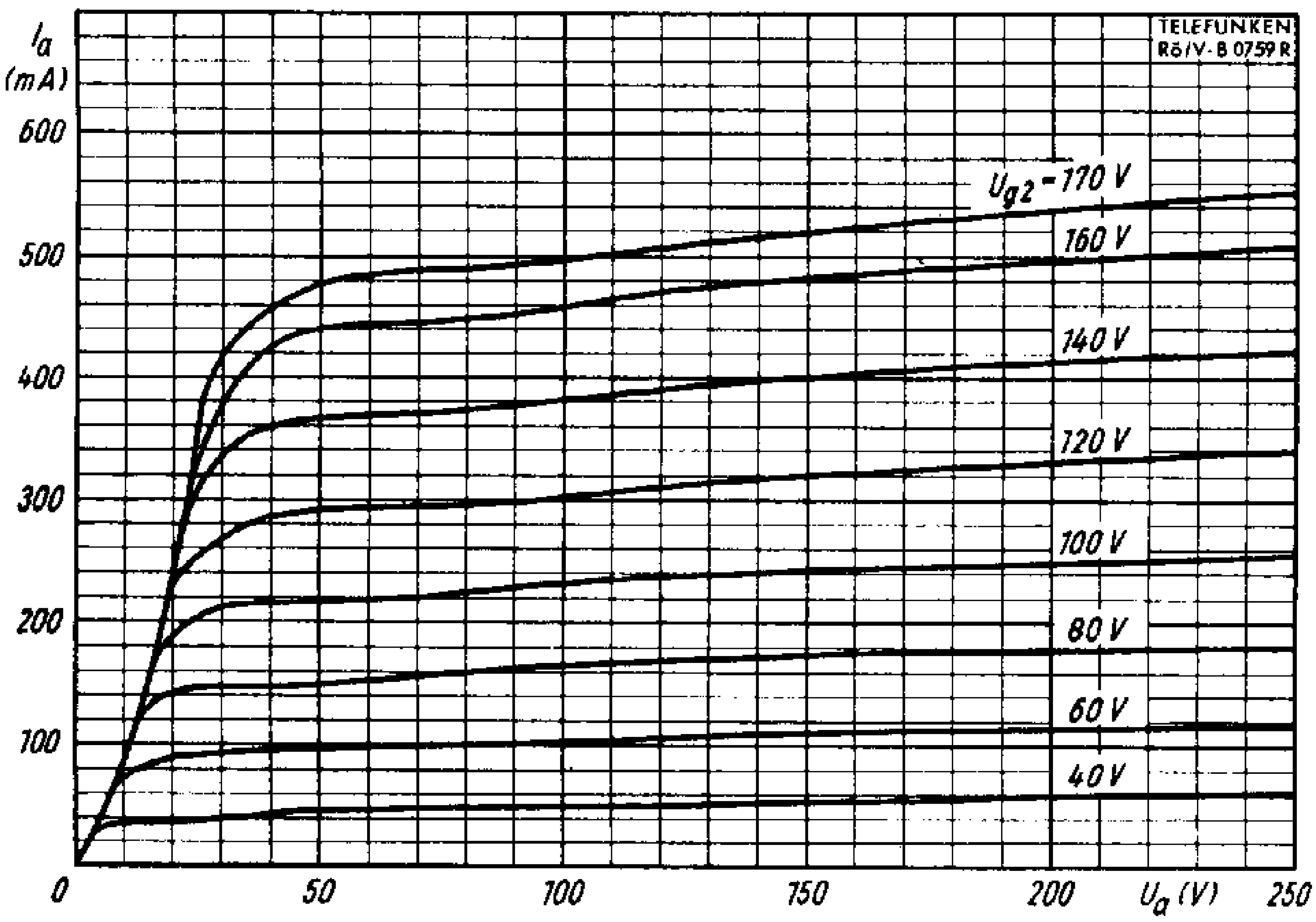


$I_a, I_{g2} = f(U_a)$

$U_{g2} = 230\ V$

U_{g1} = Parameter

——— I_a - - - - I_{g2}



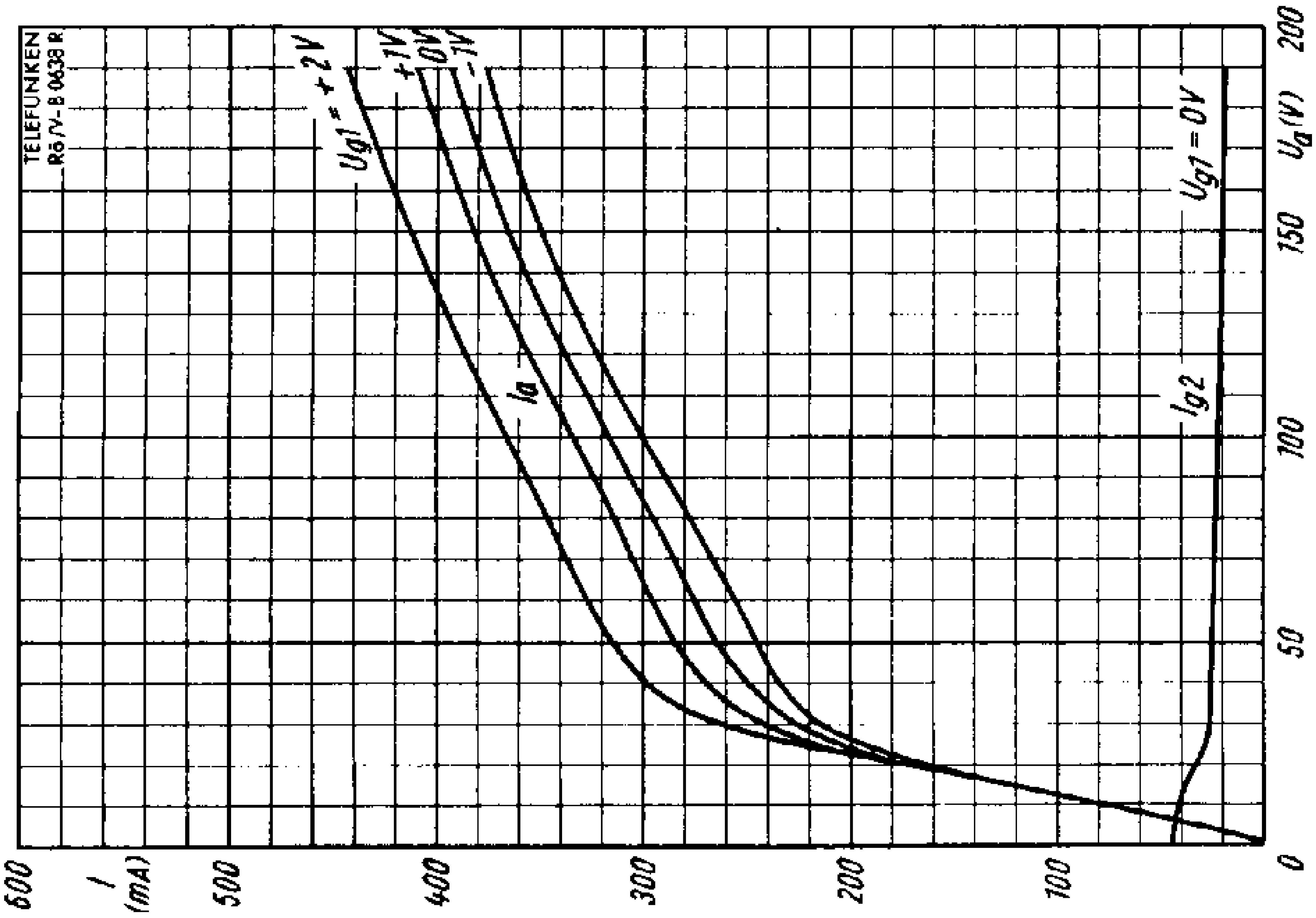
$I_a = f(U_a)$

$U_{g1} = -1\ V$

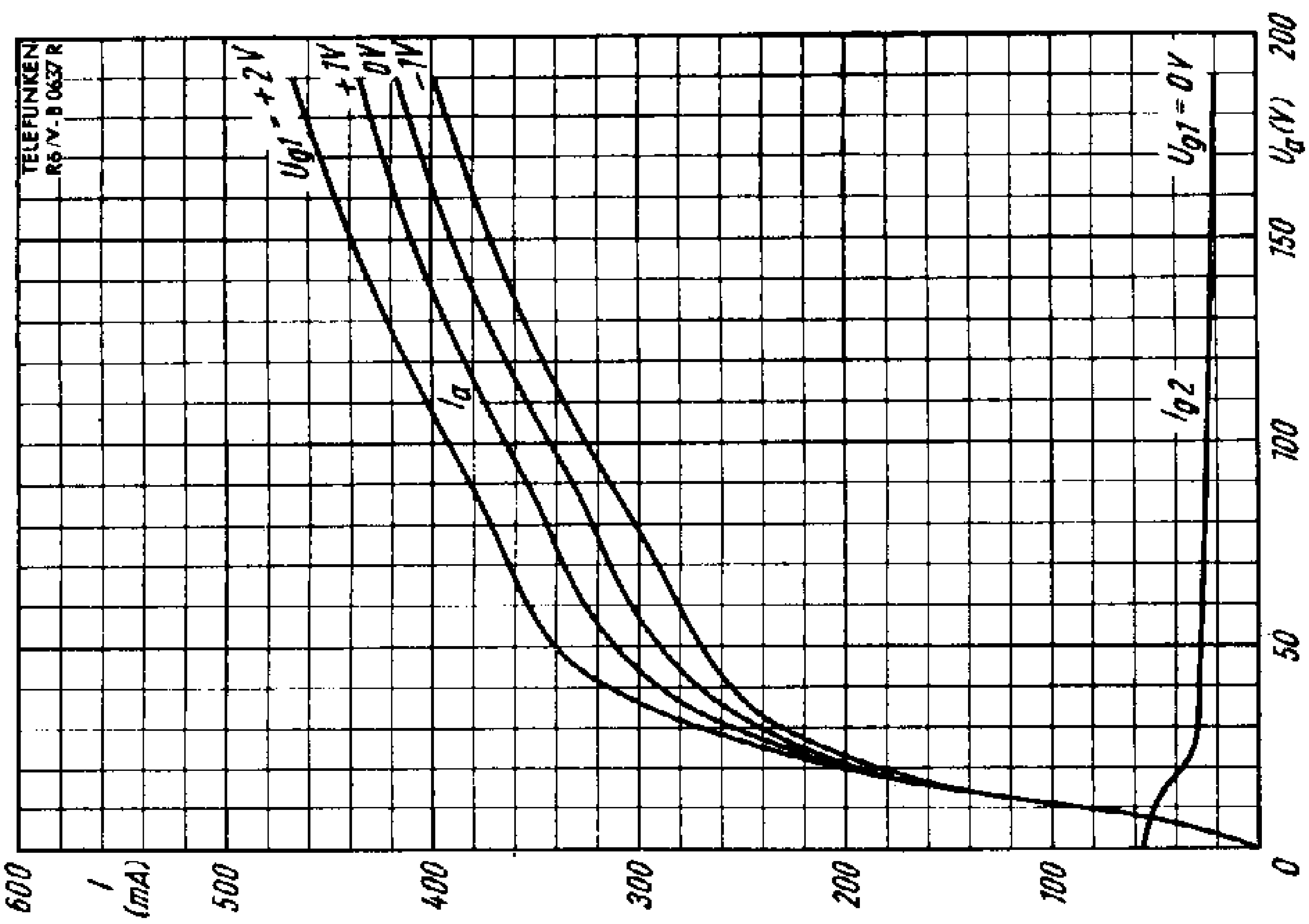
U_{g2} = Parameter

TELEFUNKEN

PL 36

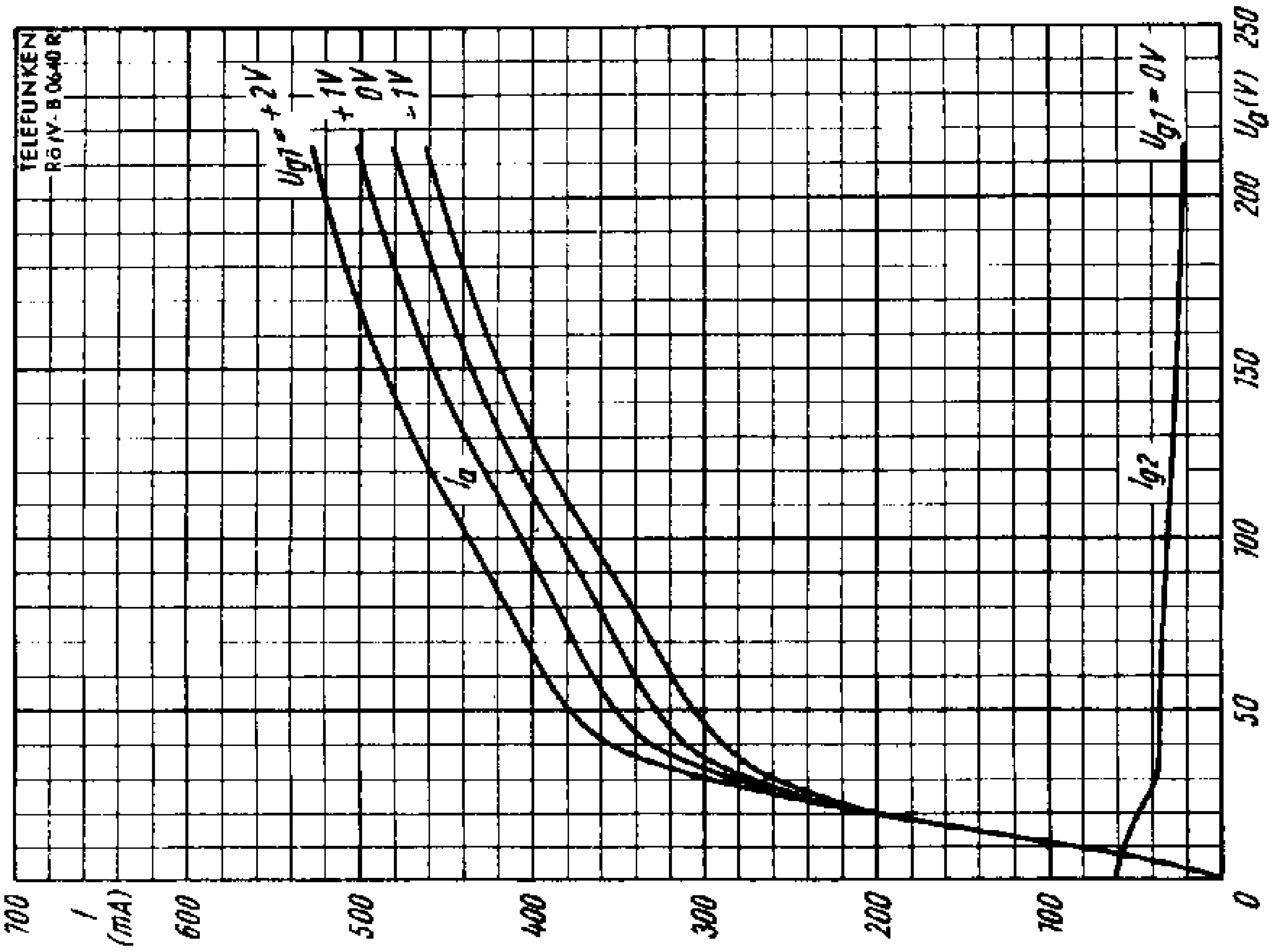


$I_a, I_{g2} = f(U_a)$
$U_b = 190$ V
$R_{g2} = 3{,}3$ kΩ
U_{g1} = Parameter

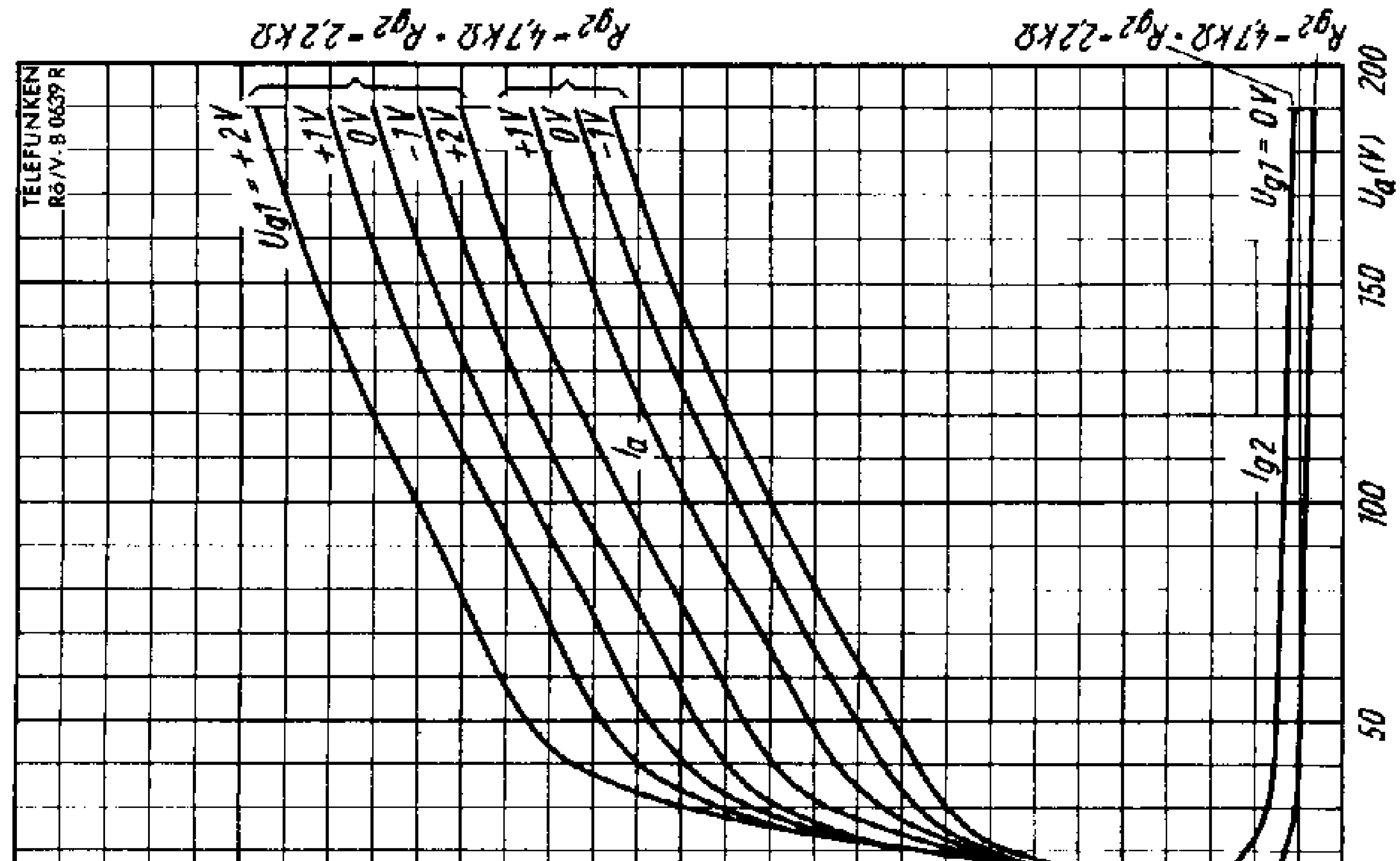


$I_a, I_{g2} = f(U_a)$
$U_b = 190$ V
$R_{g2} = 2{,}7$ kΩ
U_{g1} = Parameter

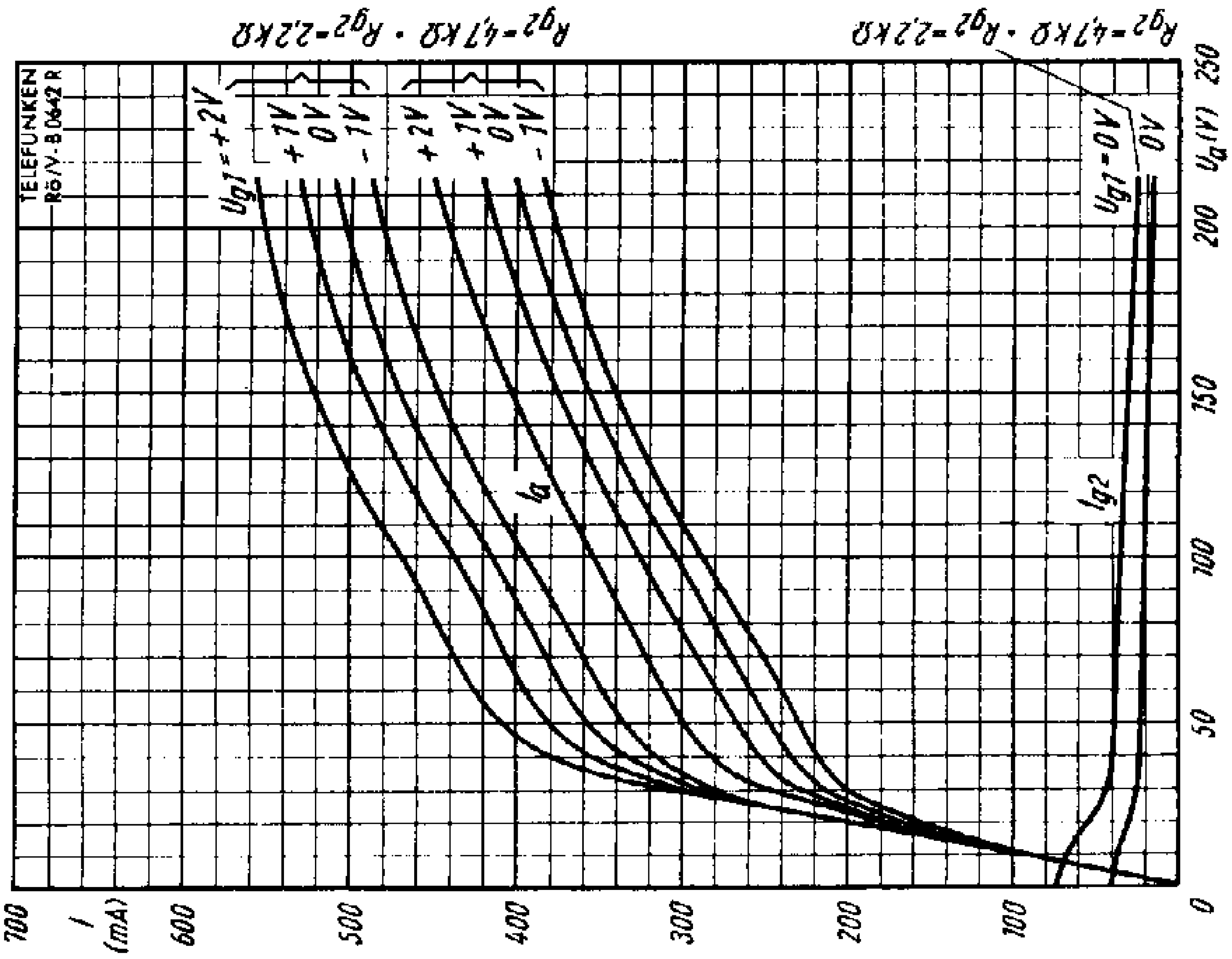
TELEFUNKEN



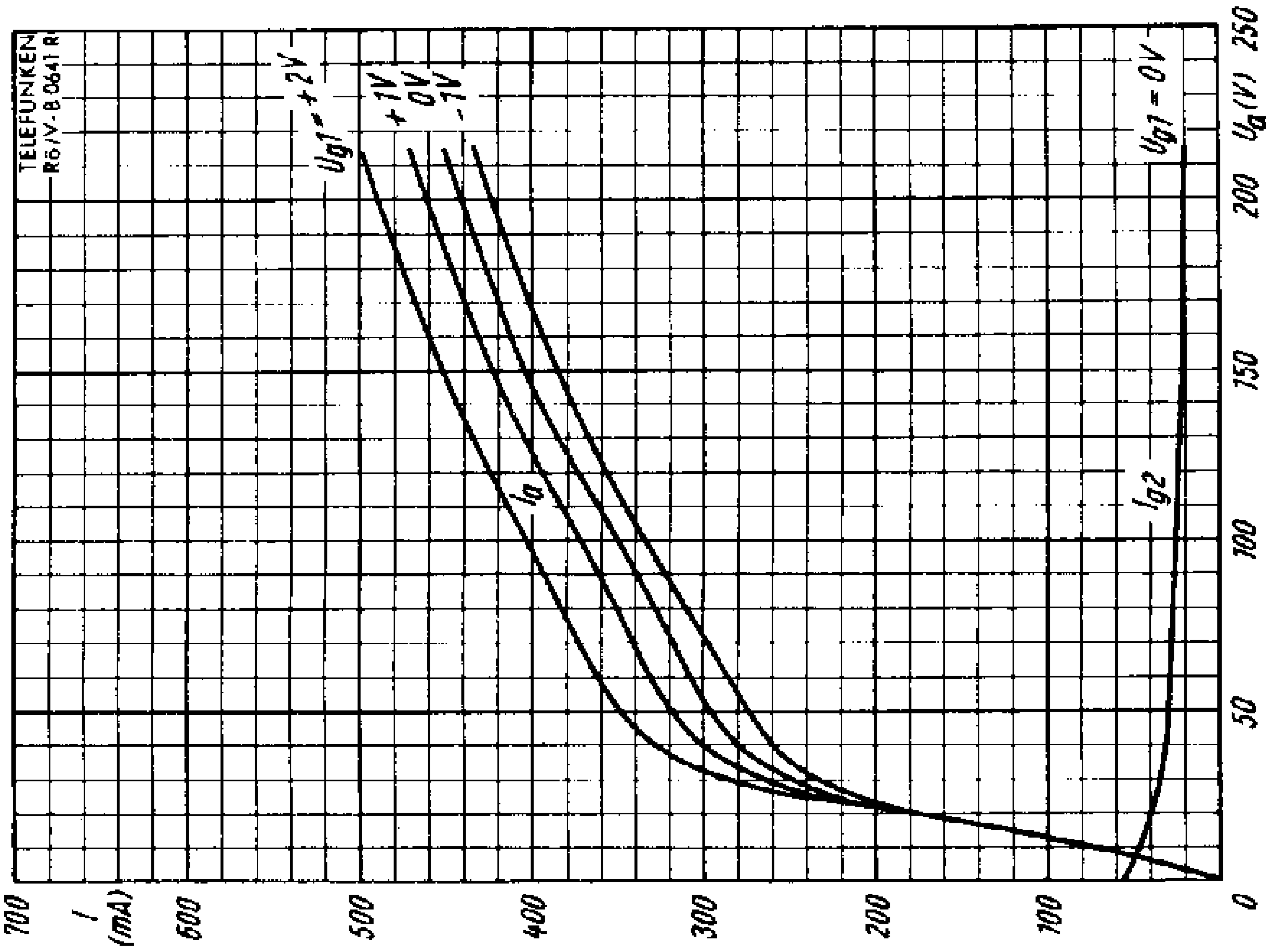
$I_a, I_{g2} = f(U_a)$
$U_b = 215$ V
$R_{g2} = 2{,}7$ kΩ
U_{g1} = Parameter



$I_a, I_{g2} = f(U_a)$
$U_b = 190$ V
R_{g2} = Parameter
U_{g1} = Parameter

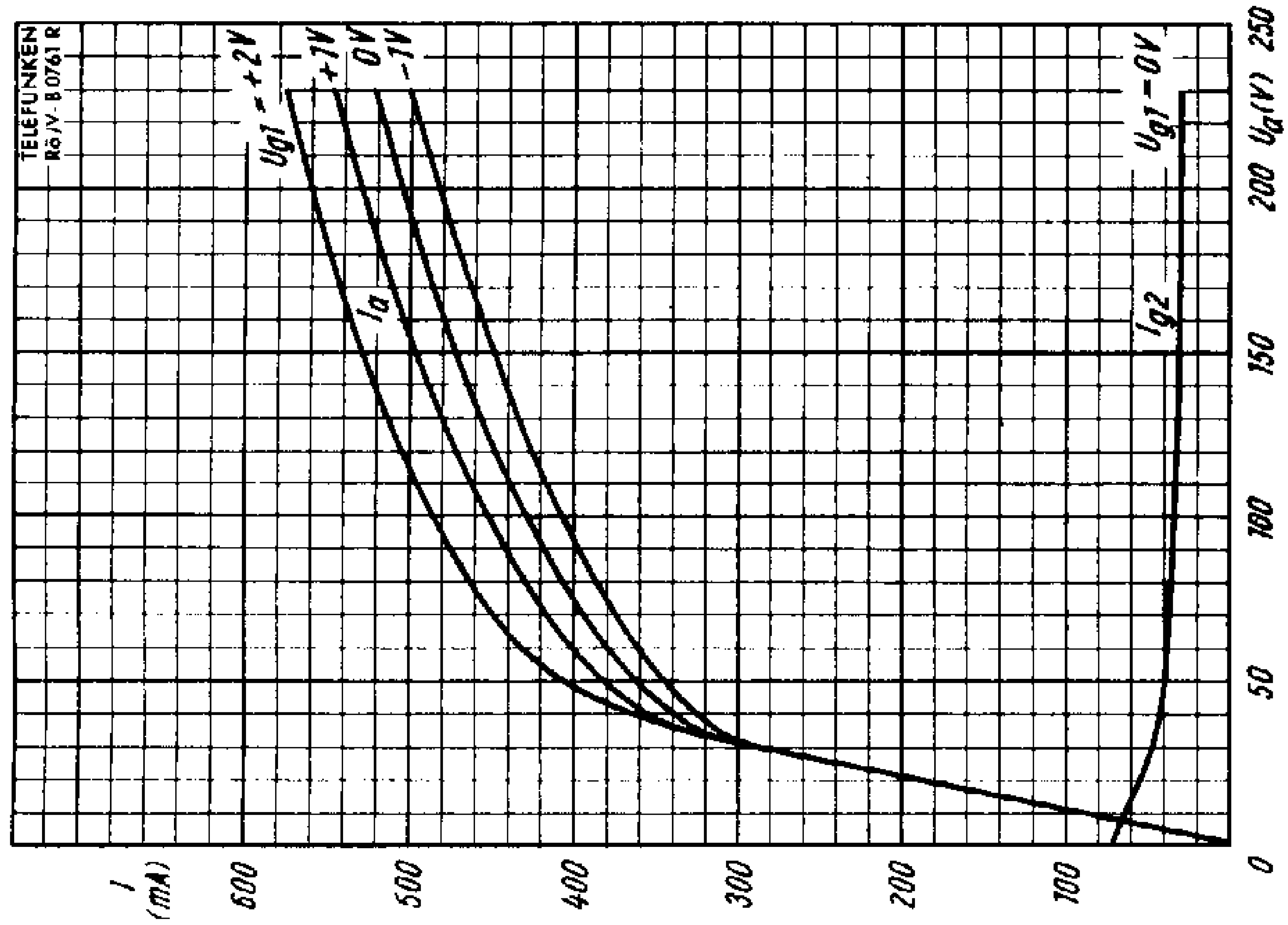


$I_a, I_{g2} = f(U_a)$
$U_b = 215$ V
R_{g2} = Parameter
U_{g1} = Parameter

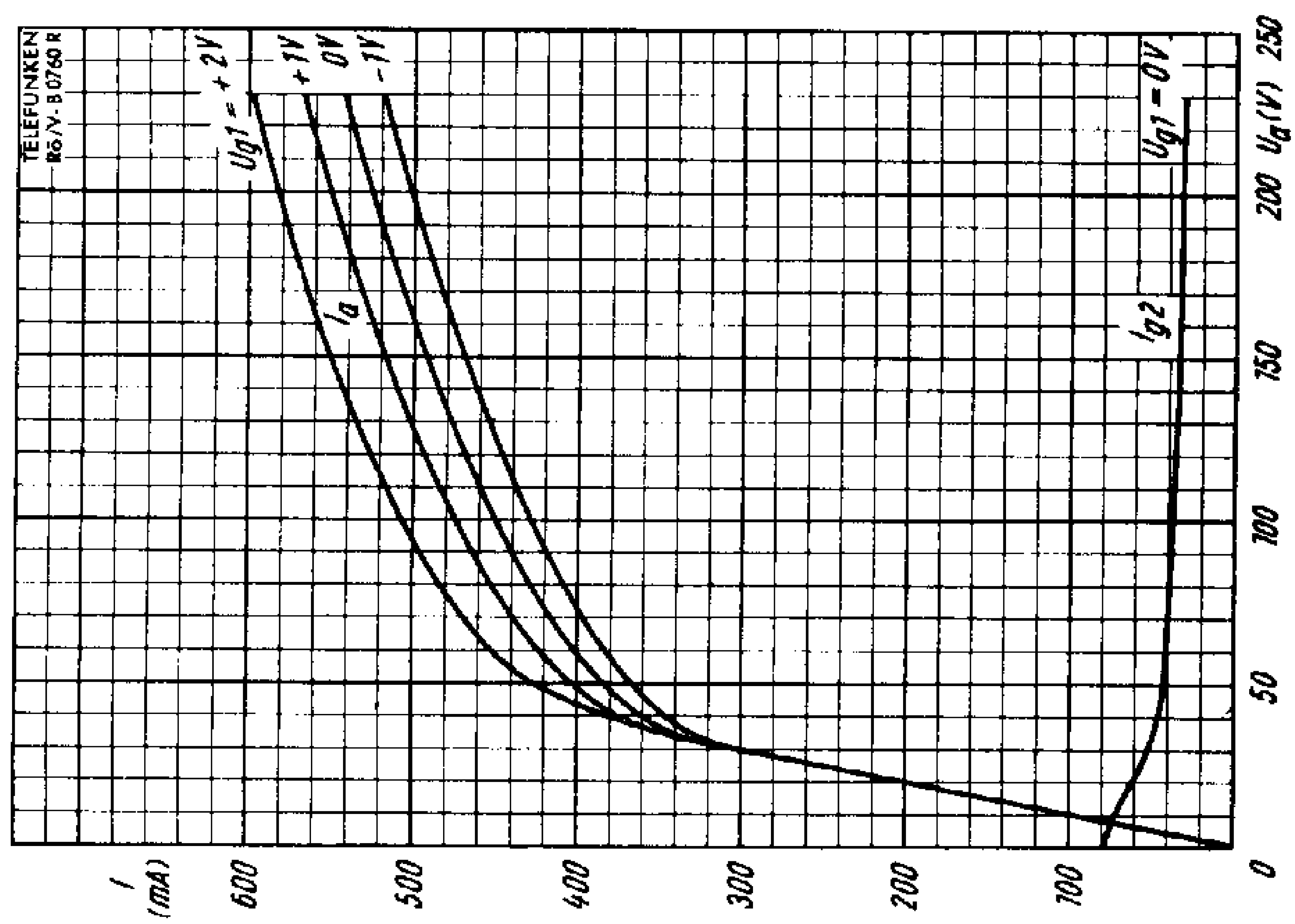


$I_a, I_{g2} = f(U_a)$
$U_b = 215$ V
R_{g2} = 3,3 kΩ
U_{g1} = Parameter

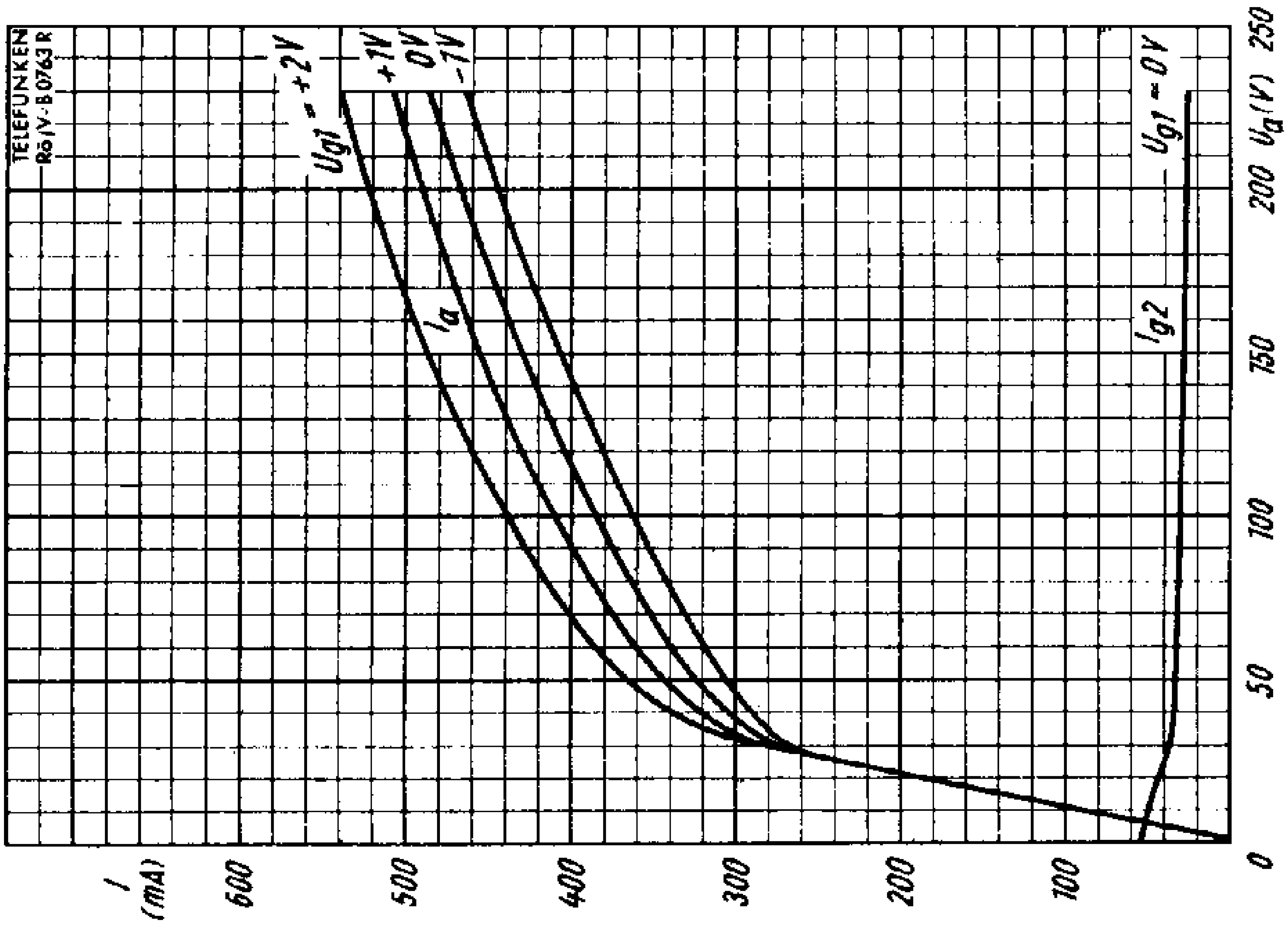
TELEFUNKEN



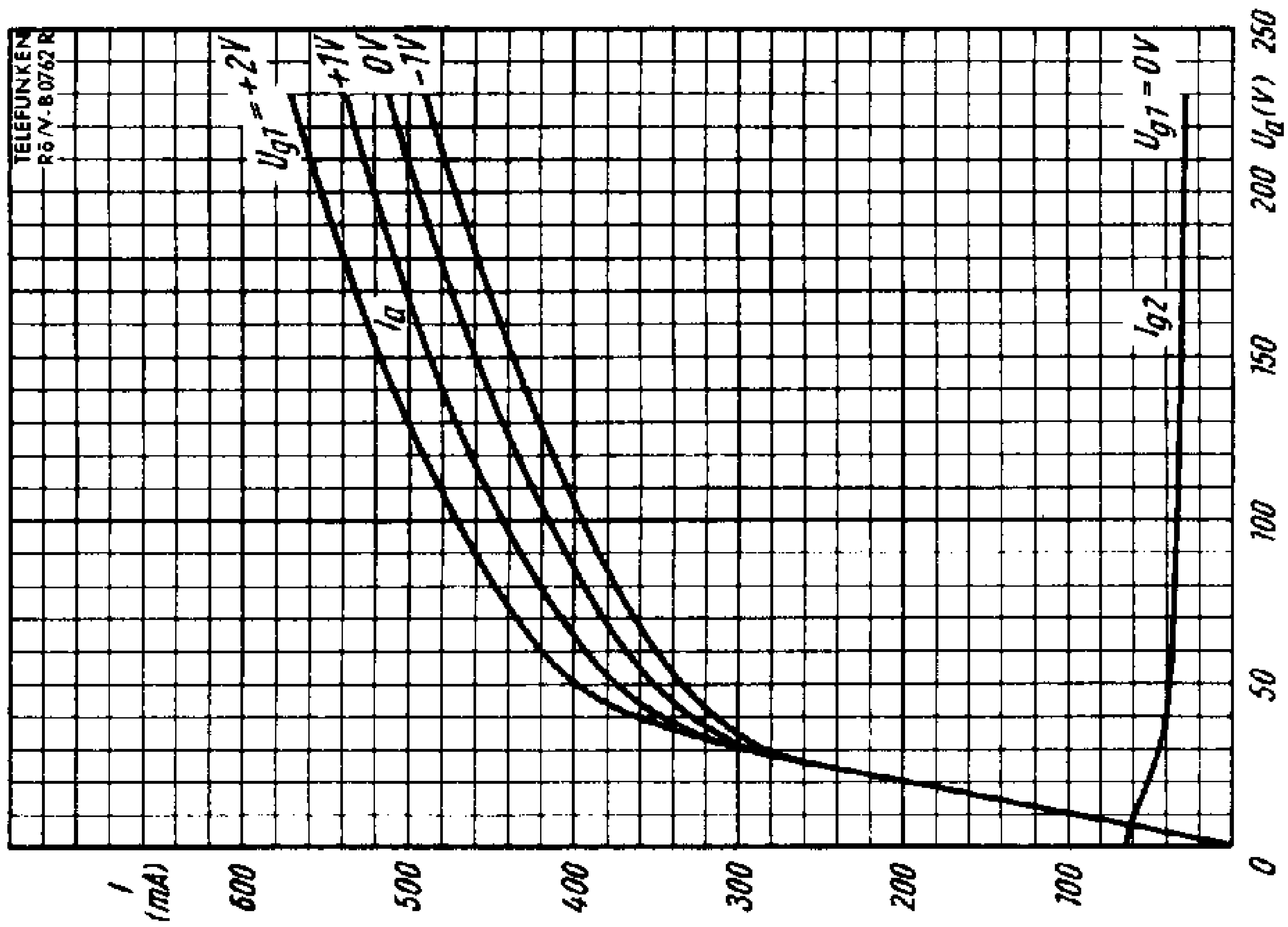
$I_a, I_{g2} = f\ (U_a)$
$U_b = 230$ V
$R_{g2} = 2{,}5$ kΩ
U_{g1} = Parameter



$I_a, I_{g2} = f\ (U_a)$
$U_b = 230$ V
$R_{g2} = 2{,}2$ kΩ
U_{g1} = Parameter

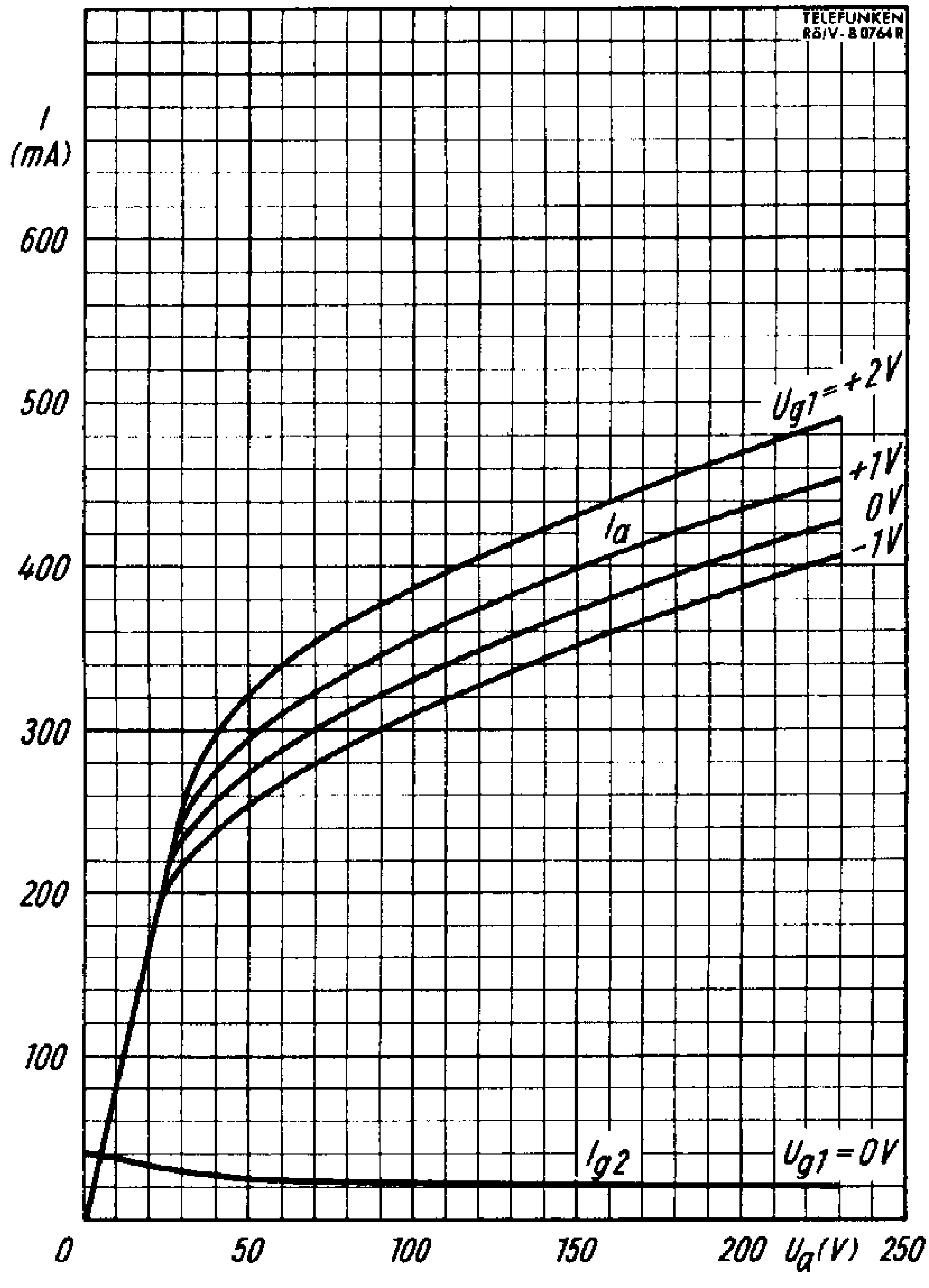


$I_a, I_{g2} = f(U_a)$
$U_b = 230$ V
$R_{g2} = 3{,}3$ kΩ
U_{g1} = Parameter



$I_a, I_{g2} = f(U_a)$
$U_b = 230$ V
$R_{g2} = 2{,}7$ kΩ
U_{g1} = Parameter

TELEFUNKEN



I_a, I_{g2} = f (U_a)
U_b = 230 V
R_{g2} = 4,7 kΩ
U_{g1} = Parameter