Netzröhre für GW-Heizung
indirekt geheizt
Serienspeisung

DC-AC-Heating
indirectly heated
connected in series

TELEFUNKEN

PCL 84

Triode/Video-Endpentode
Triode/Video-power pentode

U_f	ca. 15	V
I_f	**300**	mA

Meßwerte · Measuring values

Triode			Pentode				
U_a	**200**	V	U_a	**170**	**200**	**220**	V
U_g	−1,7	V	U_{g2}	**170**	**200**	**220**	V
I_a	3	mA	U_{g1}	−2,1	−2,9	−3,4	V
S	4	mA/V	I_a	**18**	**18**	**18**	mA
μ	65		I_{g2}	3	3	3	mA
			S	11	10,4	10	mA/V
			R_i	> 100	> 130	> 150	kΩ
			μ_{g2g1}	ca. 36	ca. 36	ca. 36	

Betriebswerte · Typical operation

Pentode als Video-Endröhre · Pentode as video power tube

U_b	**170**	**200**	**220**	V
U_{g2}	**170**	**200**	**220**	V
U_{g1}	−2	−2,8	−3,3	V
R_a	3	3	3	kΩ
I_a	**18**	**18**	**18**	mA
I_{g2}	3,2	3,1	3,1	mA
S	10,4	10	9,7	mA/V

Grenzwerte · Maximum ratings

Triode			Pentode		
U_{ao}	± **500**	V	U_{ao}	**550**	V
U_a	± **250**	V	U_a	**250**	V
U_{asp} ($I_a < 0{,}1$ mA) [1]	**600**	V	N_a	**4**	W
N_a	**1**	W	U_{g2o}	**550**	V
I_k	**12**	mA	U_{g2}	**250**	V
R_g [2]	**1**	MΩ	N_{g2}	**1,7**	W
R_g [3]	**3**	MΩ	I_k	**40**	mA
U_{ge} ($I_g \leqq +0{,}3$ μA)	−**1,3**	V	R_{g1} [2]	**1**	MΩ
U_{fk-}	**150**	V	R_{g1} [3]	**2**	MΩ
U_{fk+}	**200**= +**150**	V_{eff}	U_{g1e} ($I_{g1} \leqq +0{,}3$ μA)	−**1,3**	V
R_{fk}	**20**	kΩ	U_{fk}	**200**	V
			R_{fk}	**20**	kΩ

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[1] Impulsdauer max. 18% einer Periode, t_{max} 18 μs
Pulse duration max. 18% per period, t_{max} 18 μs

[2] $U_{g\,fest}$ · fixed grid bias

[3] $U_{g\,autom.}$ · cathode grid bias

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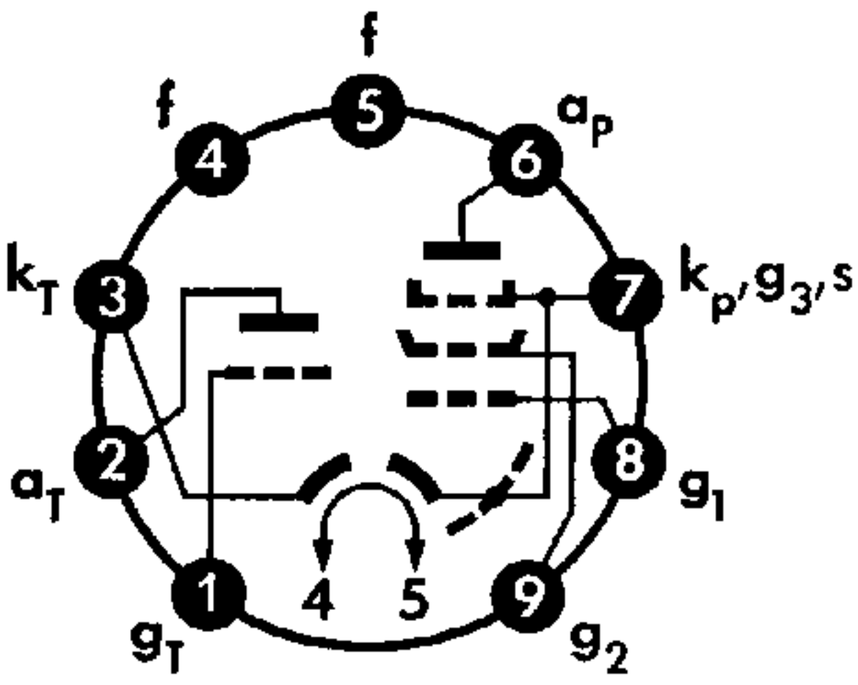
Kapazitäten · Capacitances

Triode			Pentode			Triode/Pentode		
c_e	4,2	pF	c_e	9	pF	$c_{aT/g1P}$	< 0,01	pF
c_a	2,3	pF	c_a	4,2	pF	$c_{gT/g1P}$	< 0,01	pF
c_{ga}	2,7	pF	c_{g1a}	< 0,1	pF			
c_{gf}	< 0,1	pF						

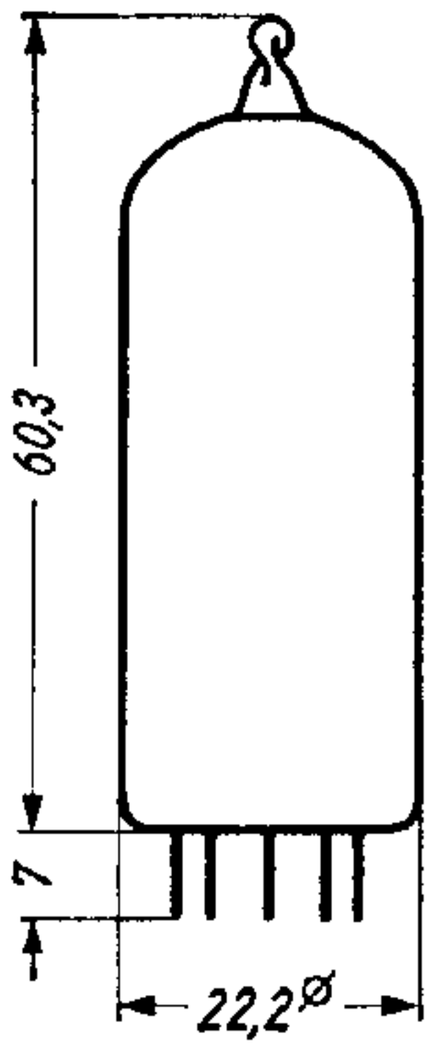
Sockelschaltbild
Base connection



Pico 9 · Noval

max. Abmessungen
max. dimensions

DIN 41539, Nenngröße 50, Form A



Gewicht · Weight
max. 18 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.

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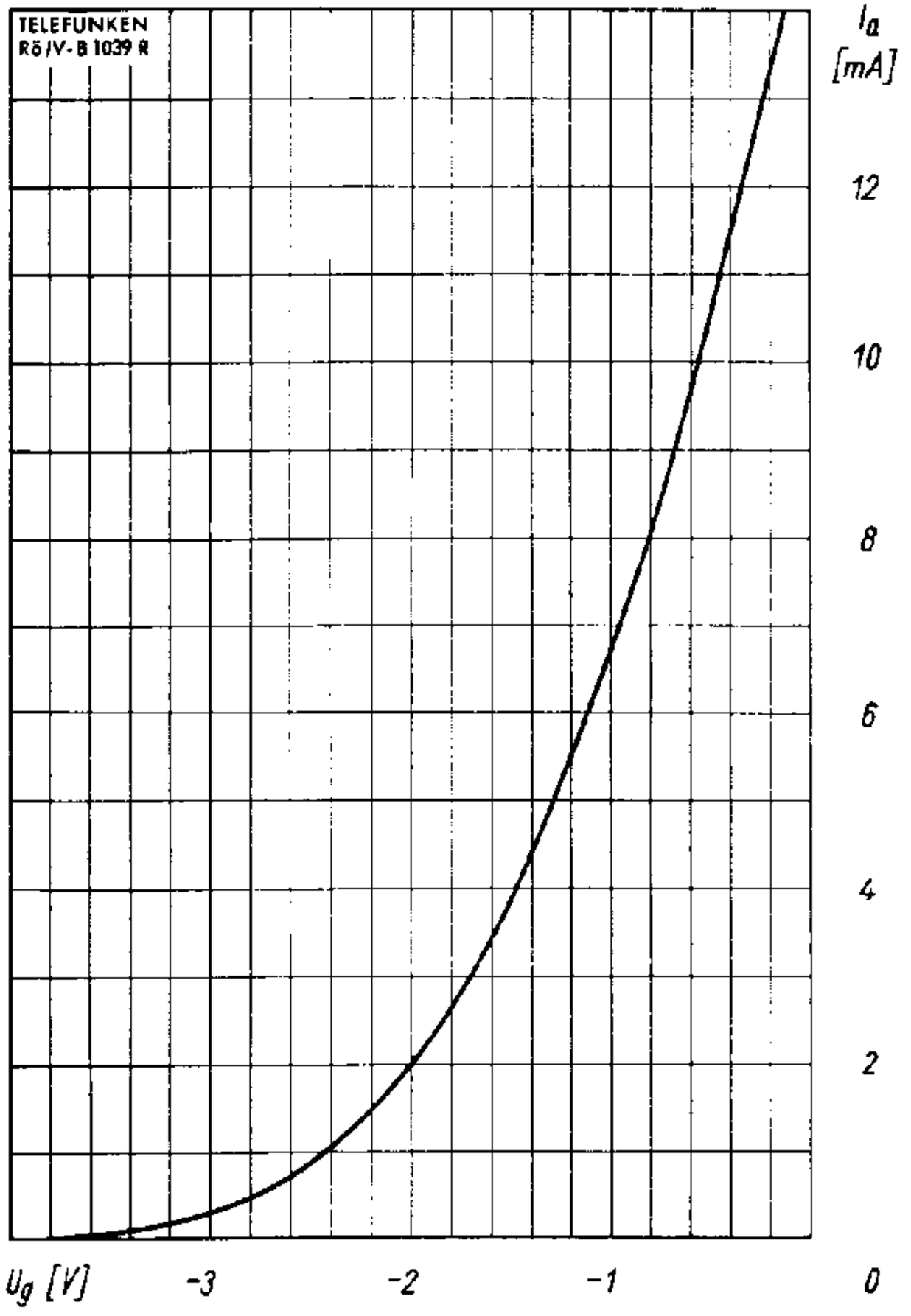
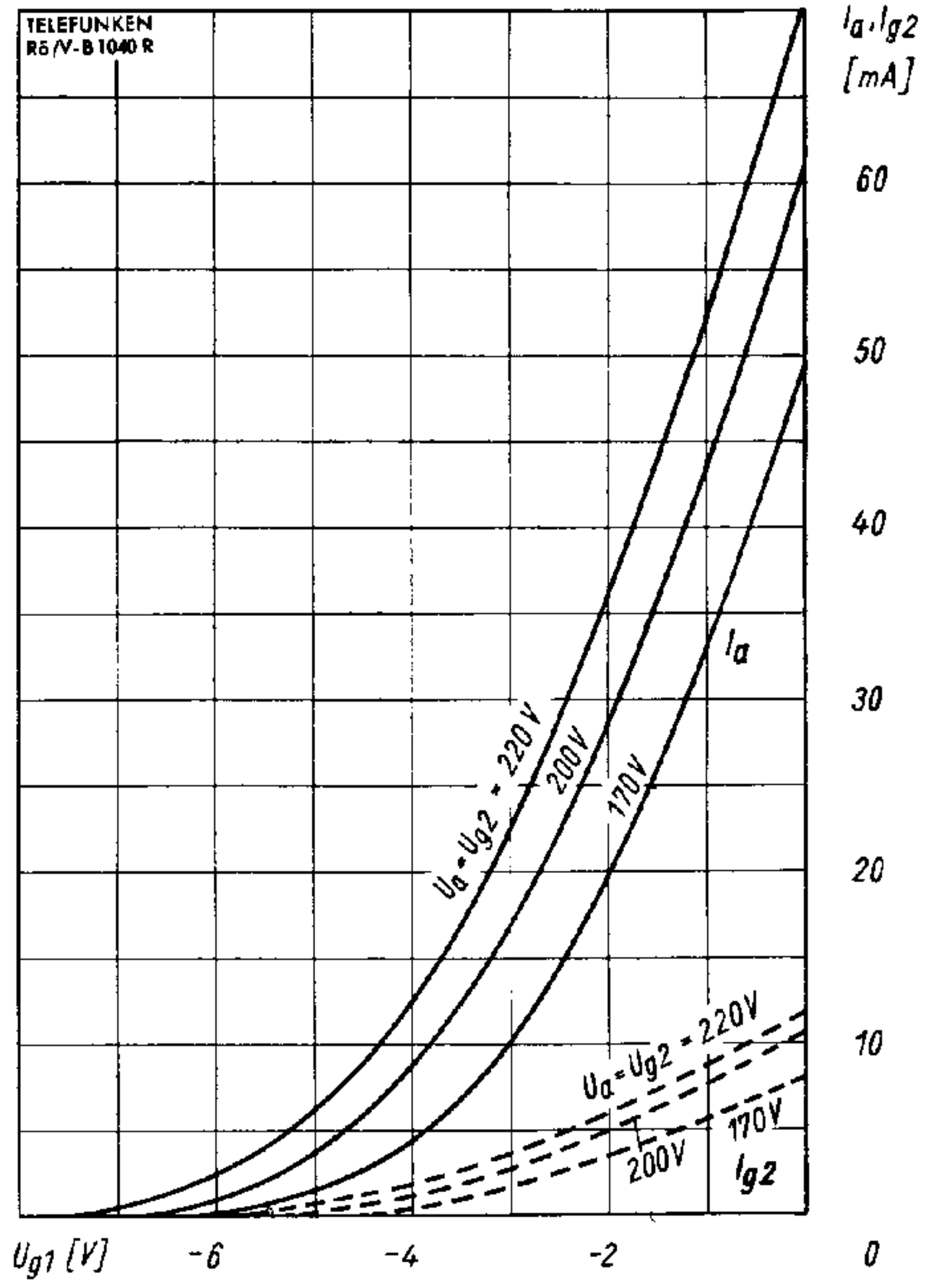


Triode

$I_a = f(U_g)$

$U_a = 200\ V$



Pentode

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

U_a = Parameter

TELEFUNKEN

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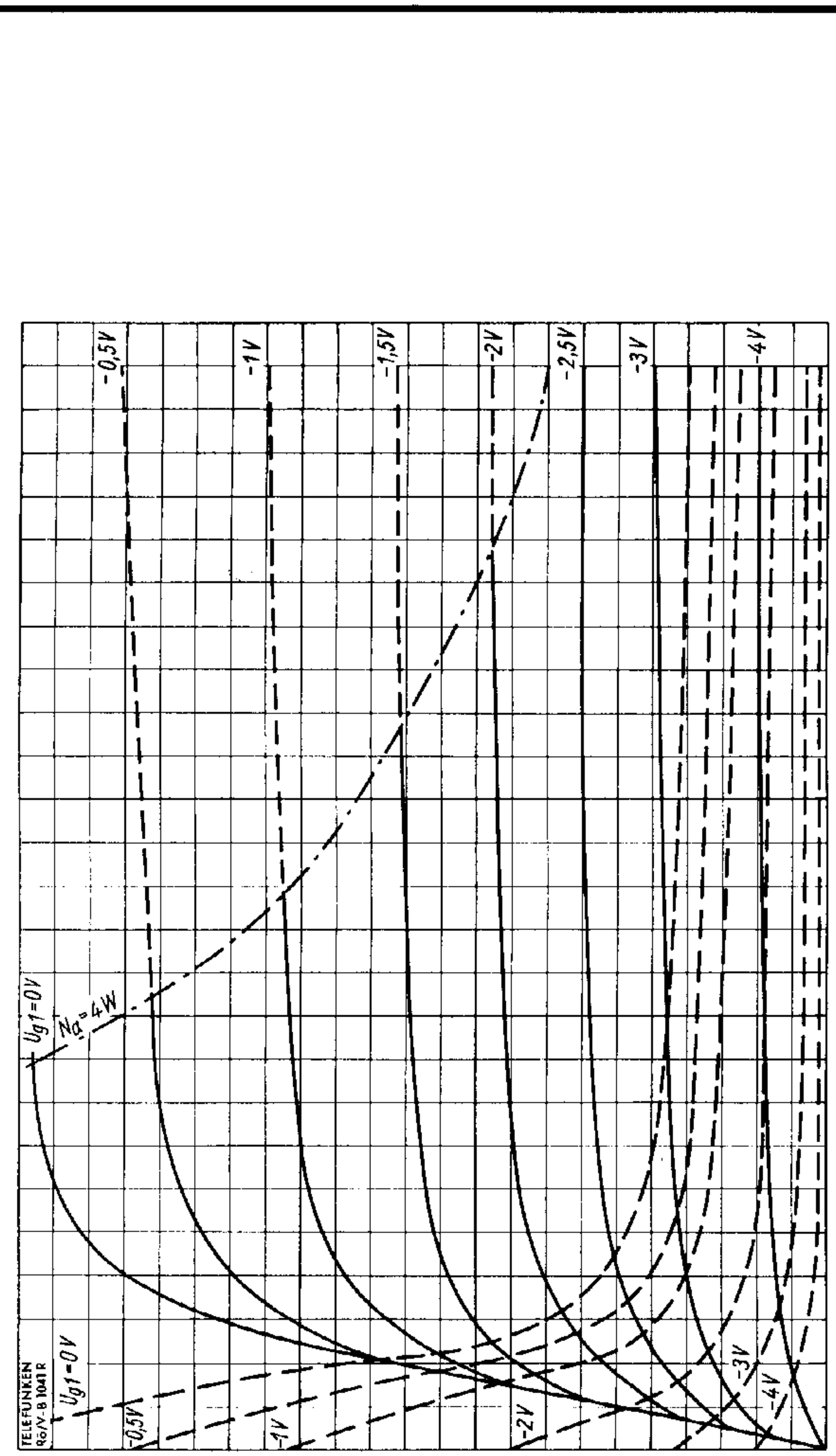


Pentode

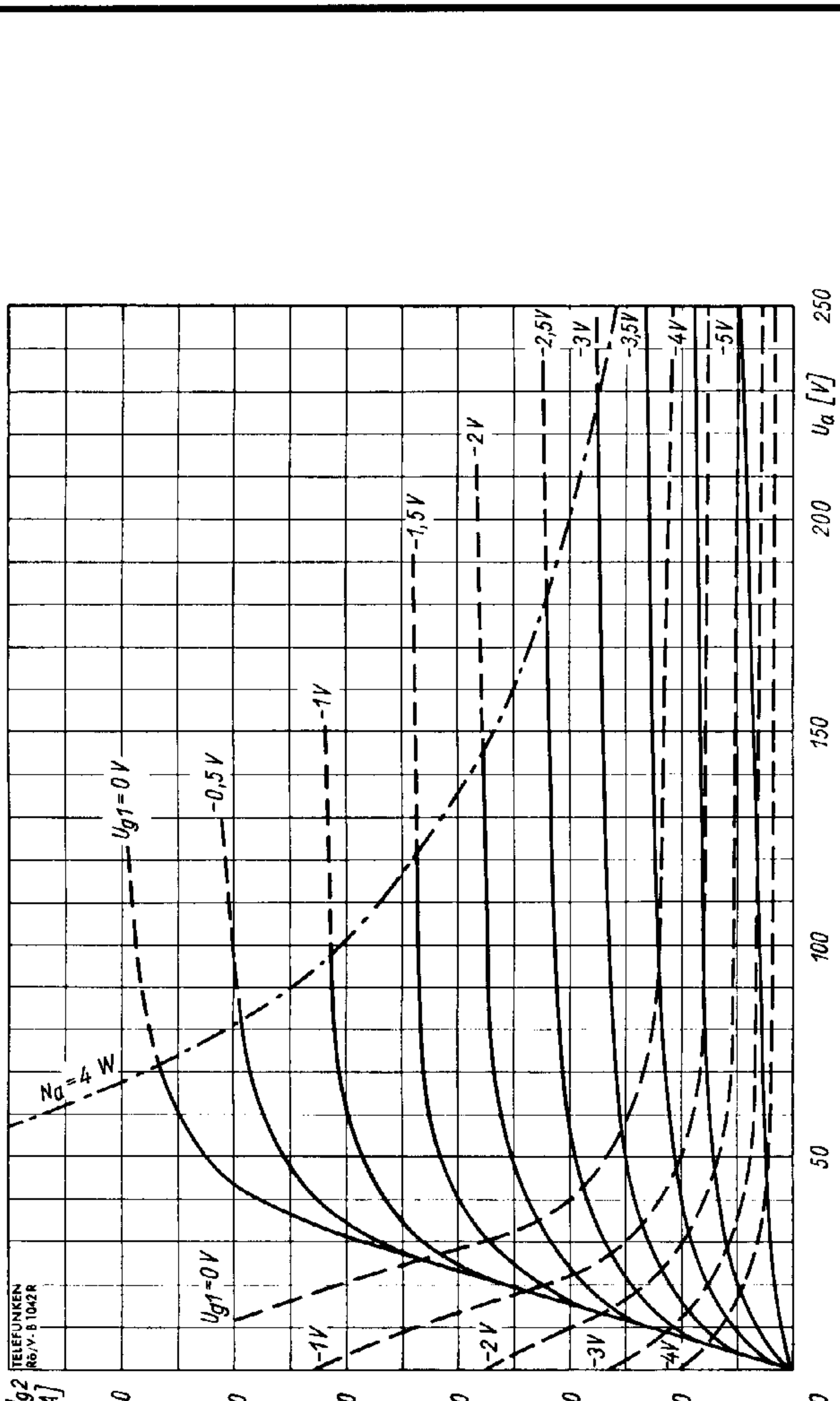
I_a, I_{g2} = f (U_a)

U_{g2} = 170 V

U_{g1} = Parameter

---- I_{g2}

—— I_a


Pentode
I_a, I_{g2} = f (U_a)
U_{g2} = 200 V
U_{g1} = Parameter
—— I_a
- - - - I_{g2}
I_a, I_{g2} [mA]
U_a [V]
N_a=4 W
U_{g1}=0 V
-0,5 V
-1 V
-1,5 V
-2 V
-2,5 V
-3 V
-3,5 V
-4 V
-5 V
TELEFUNKEN Ro/V-B 1042 R

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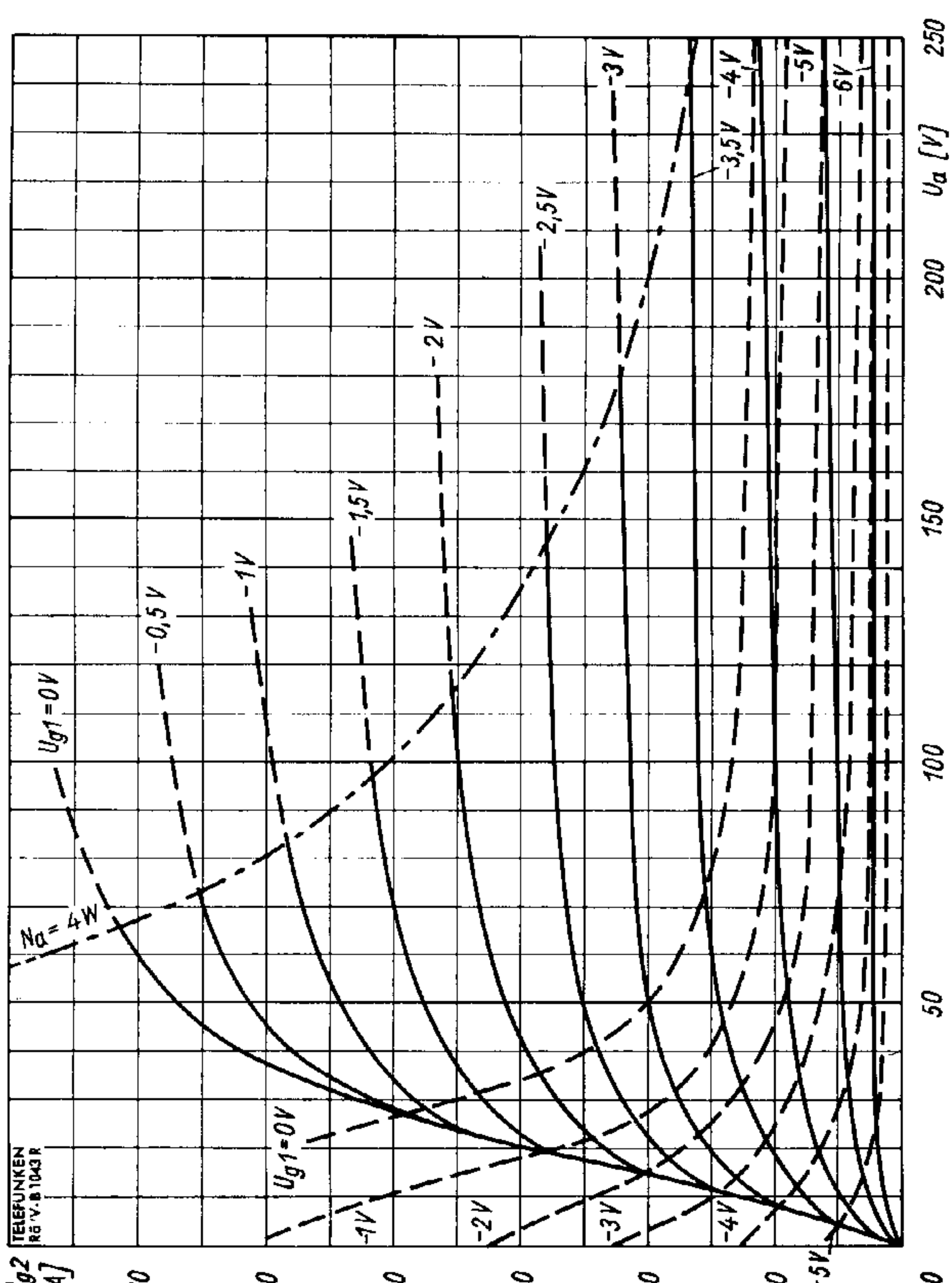


Pentode

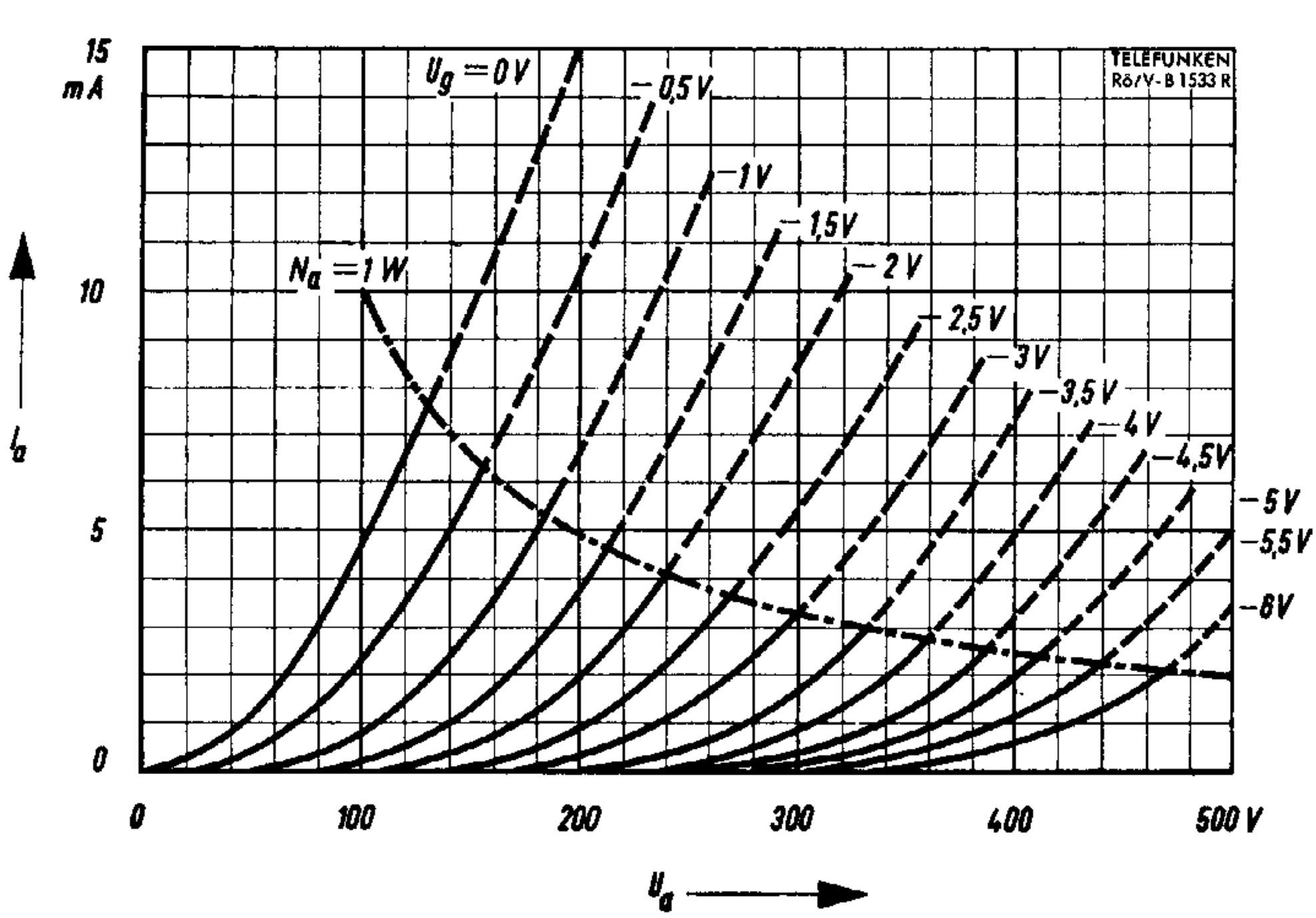
$I_a, I_{g2} = f(U_a)$

$U_{g2} = 220$ V

U_{g1} = Parameter

—— I_a

- - - - I_{g2}



$I_a = f(U_a)$

U_g = Parameter

Triode