Netzröhre für GW-Heizung
indirekt geheizt
Serien- oder Parallelspeisung

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

TELEFUNKEN

EF 85

Regelbare
HF/ZF-Pentode

Remote Cutoff
RF/IF-Pentode

U_f	6,3	V
I_f	300	mA

Meßwerte · Measuring Values

U_a	250	V
U_{g3}	0	V
U_{g2}	100	V
U_{g1}	−2	V
I_a	10	mA
I_{g2}	2,5	mA
S	6	mA/V
R_i	0,6	MΩ
μ_{g2g1}	26	
r_e (50 MHz)	9	kΩ
r_{aeq}	1,4	kΩ

Betriebswerte · Typical Operation

als ZF-Verstärker · as IF-Amplifier

$U_a = U_b$	250		V
U_{g3}	0		V
R_{g2}	60		kΩ
U_{g1}	−2	−35	V
U_{g2}	100		V
I_a	10		mA
I_{g2}	2,5		mA
S	6	0,06	mA/V
R_i	0,6	> 5	MΩ

$U_a = U_b$	250		250		V
U_{g3}	0		0		V
R_{g2}	18 [1]		22 [2]		kΩ
U_{g1}	−1,9	−35	−2,1	−35	V
U_{g2}	97		103		V
I_a	10		10		mA
I_{g2}	2,5		2,5		mA
S	6	0,06	6	0,06	mA/V
R_i	0,6	> 5	0,6	> 5	MΩ
r_{aeq}	1,4		1,4		kΩ

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[1] Gemeinsamer Schirmgitter-Vorwiderstand der Röhren EF 85 und ECH 81 als Mischröhre.
R_{g2} common for the tubes EF 85 and ECH 81 as Mixer.

[2] Gemeinsamer Schirmgitter-Vorwiderstand der Röhren EF 85 und ECH 81 als HF- oder ZF-Verstärker.
R_{g2} common for the tubes EF 85 and ECH 81 as RF- or IF-Amplifier.

EF 85

TELEFUNKEN

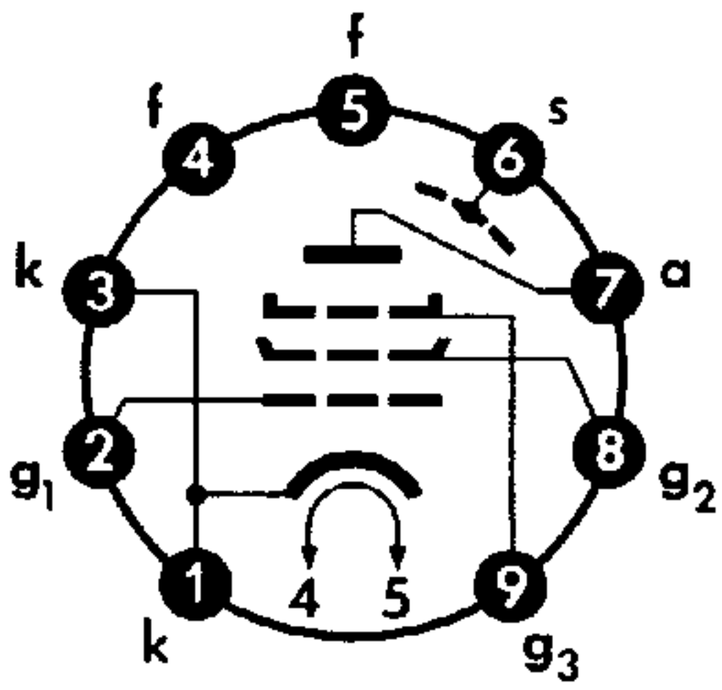
Grenzwerte · Maximum Ratings

U_{ao}	**550**	V
U_a	**300**	V
N_a	**2,5**	W
U_{g2o}	**550**	V
U_{g2}	**300**	V
N_{g2}	**0,65**	W
I_k	**15**	mA
U_{g1e} ($I_{g1} \leqq +0{,}3\ \mu A$)	**−1,3**	V
R_{g1}	**3**	MΩ
U_{fk}	**150**	V
R_{fk}	**20**	kΩ

Kapazitäten · Capacitances

c_e		6,9	pF
c_a		3,2	pF
c_{g1a}	<	0,007	pF
c_{g1f}	<	0,15	pF

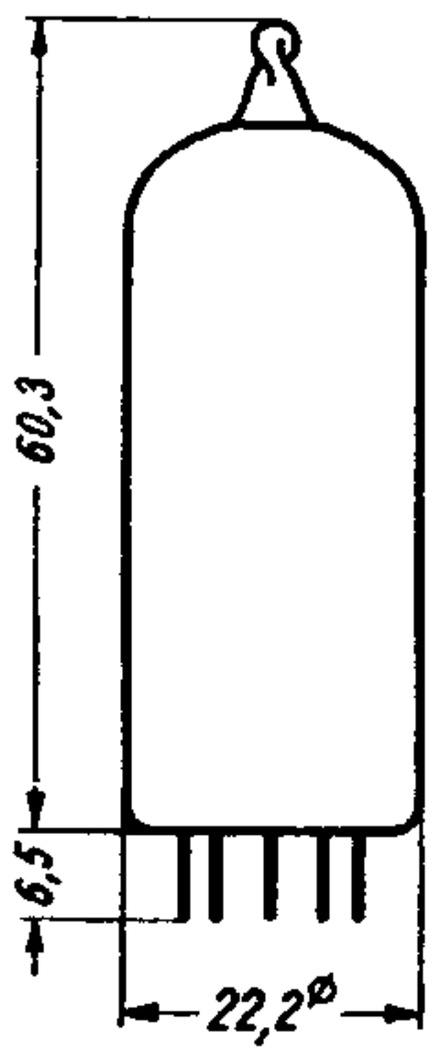
Sockelschaltbild
Base connection



Pico 9 · Noval

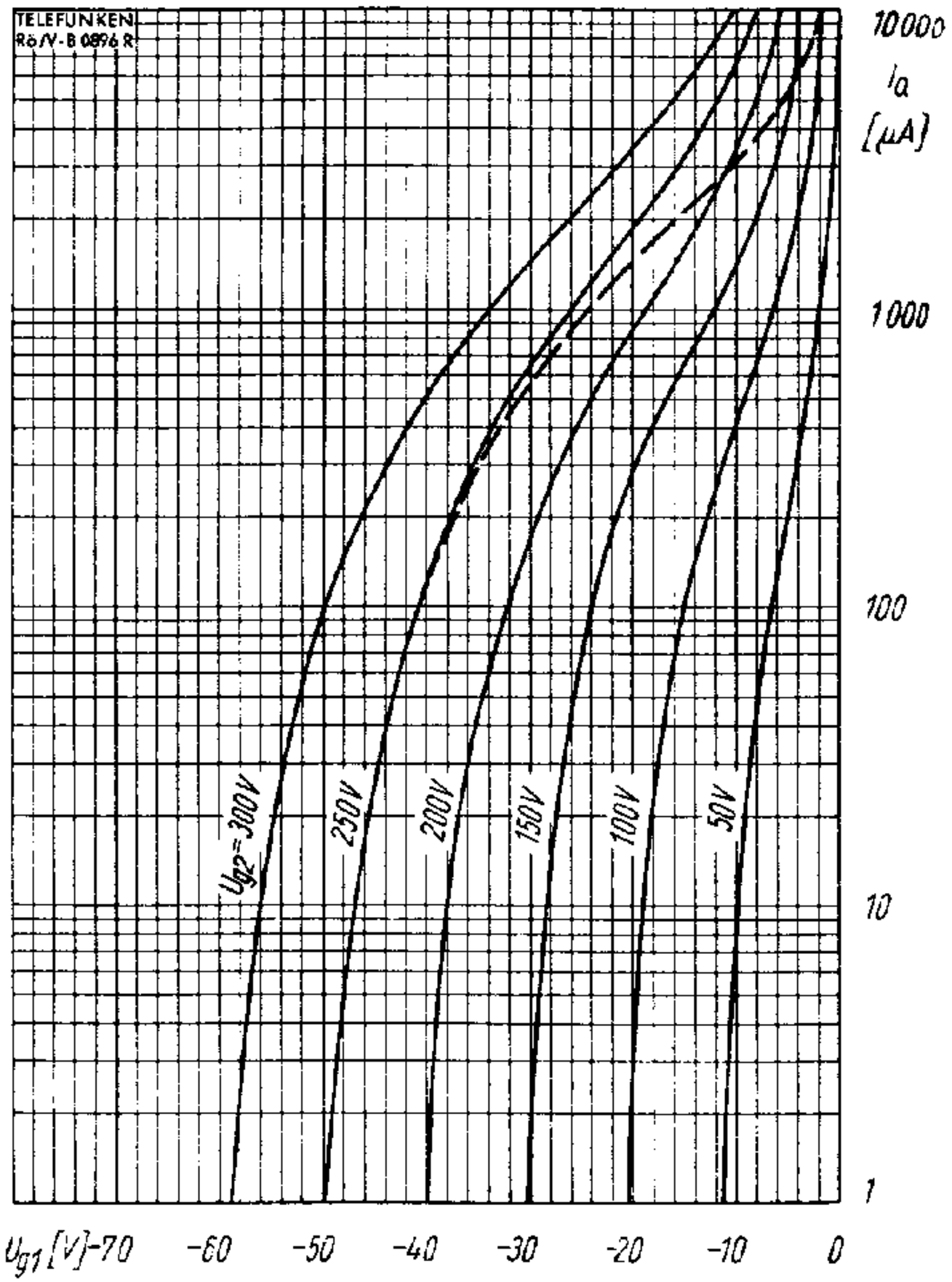
max. Abmessungen
max. Dimensions

DIN 41539, Nenngröße 50, Form A

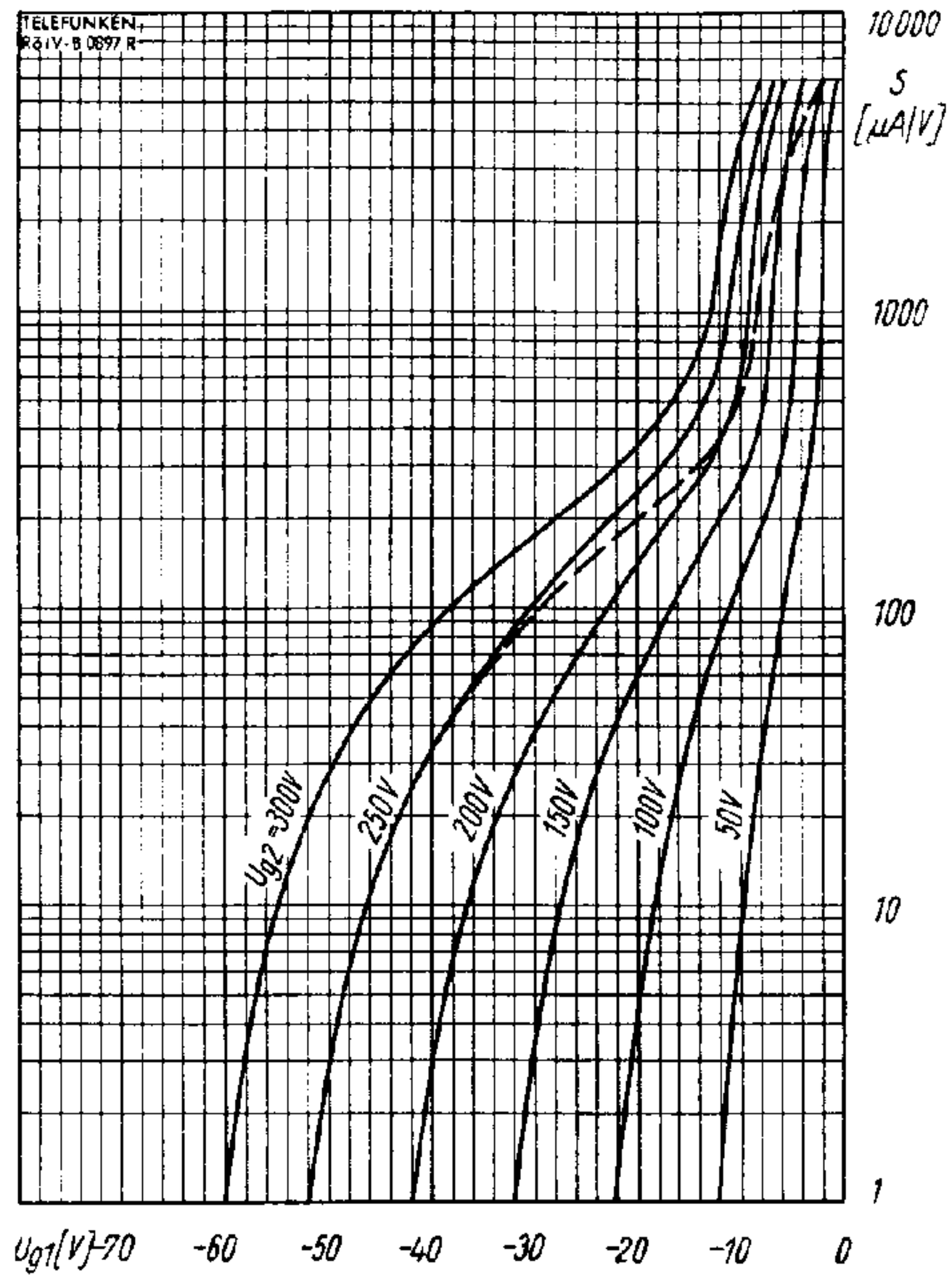


Gewicht · Weight
max. 18 g

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



$I_a = f(U_{g1})$
$U_a = 250 \ldots 300$ V
$U_{g3} = 0$ V
U_{g2} = Parameter



$S = f(U_{g1})$
$U_a = 250 \ldots 300$ V
$U_{g3} = 0$ V
U_{g2} = Parameter

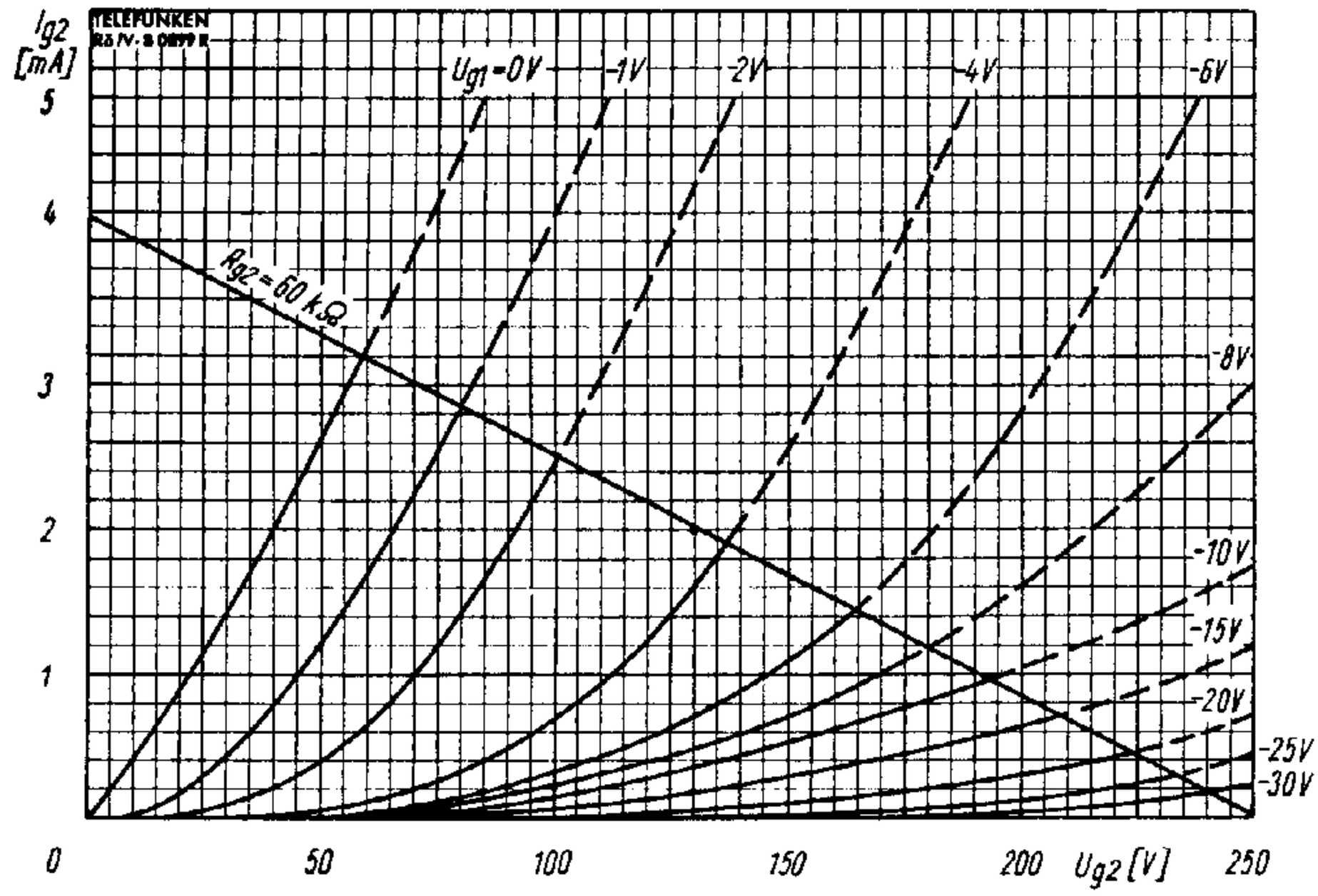
----- $U_a = U_b = 250$ V
$R_{g2} = 60$ kΩ

TELEFUNKEN

EF 85

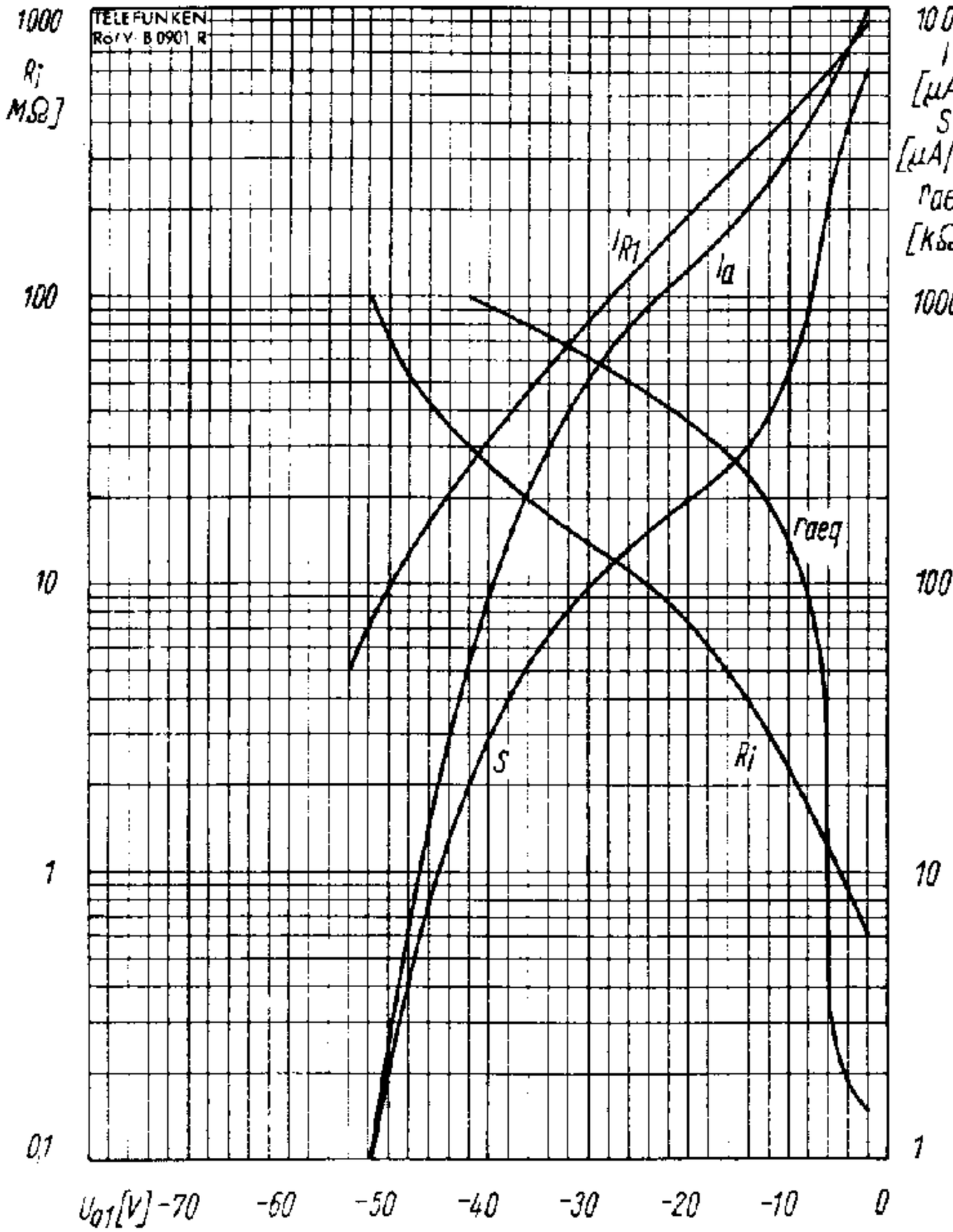
EF 85

TELEFUNKEN



$I_{g2} = f(U_{g2})$
$U_a = 250\ V$
$U_{g3} = 0\ V$
$U_{g1} =$ Parameter

$I_a, I_{g2}, R_i, S, r_{aeq} = f(U_{g1})$
$U_a = U_b = 250\ V$
$U_{g3} = 0\ V$
$R_{g2} = 60\ k\Omega$



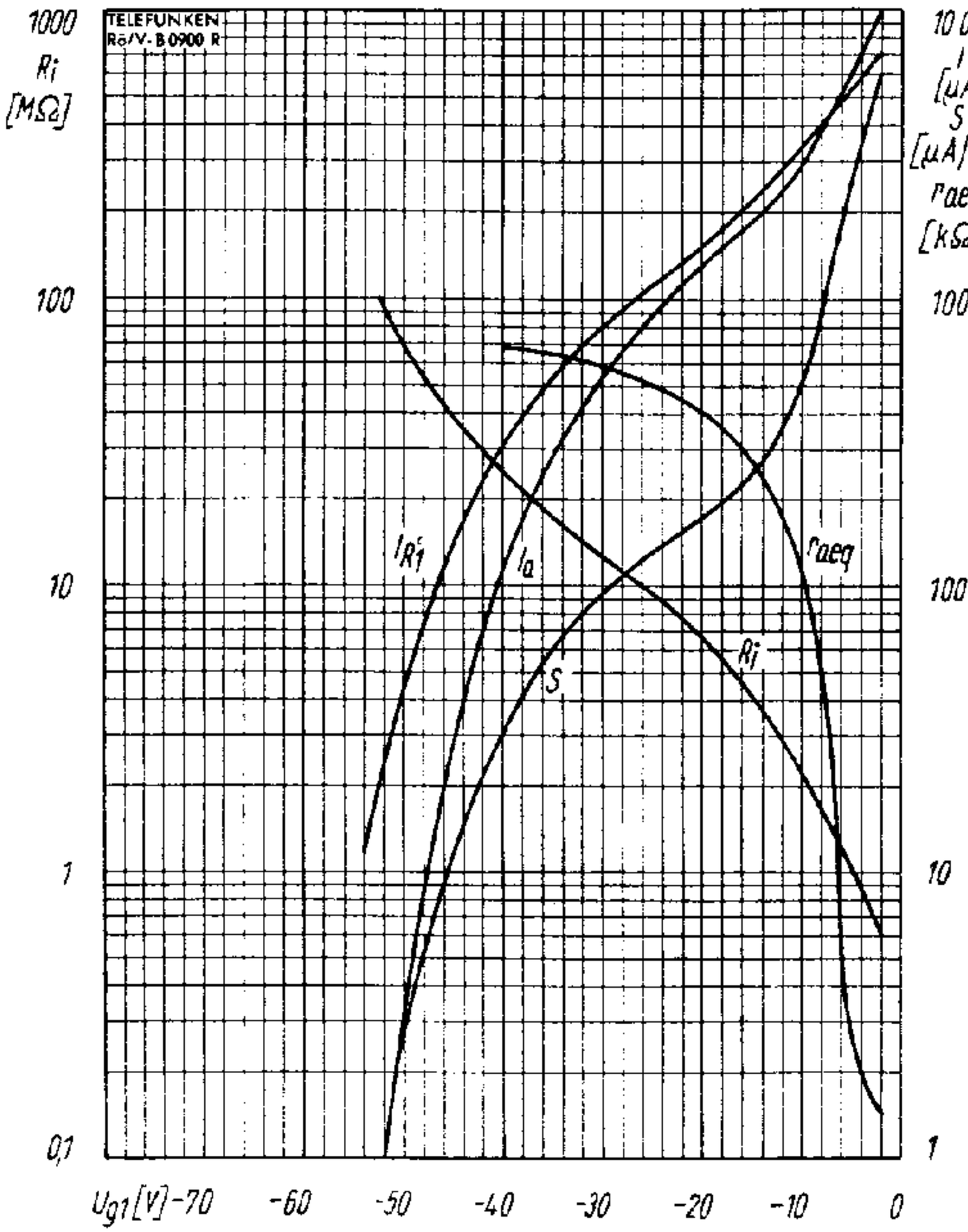
$I_a, I_{R1}, R_i, S, r_{aeq} = f(U_{g1})$

$U_a = U_b = 250$ V

$U_{g3} = 0$ V

$R_1 = 18$ kΩ

ECH 81 als Mischröhre · ECH 81 as Mixer



$I_a, I_{R1}, R_i, S, r_{aeq} = f(U_{g1})$

$U_a = U_b = 250$ V

$U_{g3} = 0$ V

$R_1 = 22$ kΩ

ECH 81 als HF/ZF-Verstärker · ECH 81 as RF/IF-Amplifier

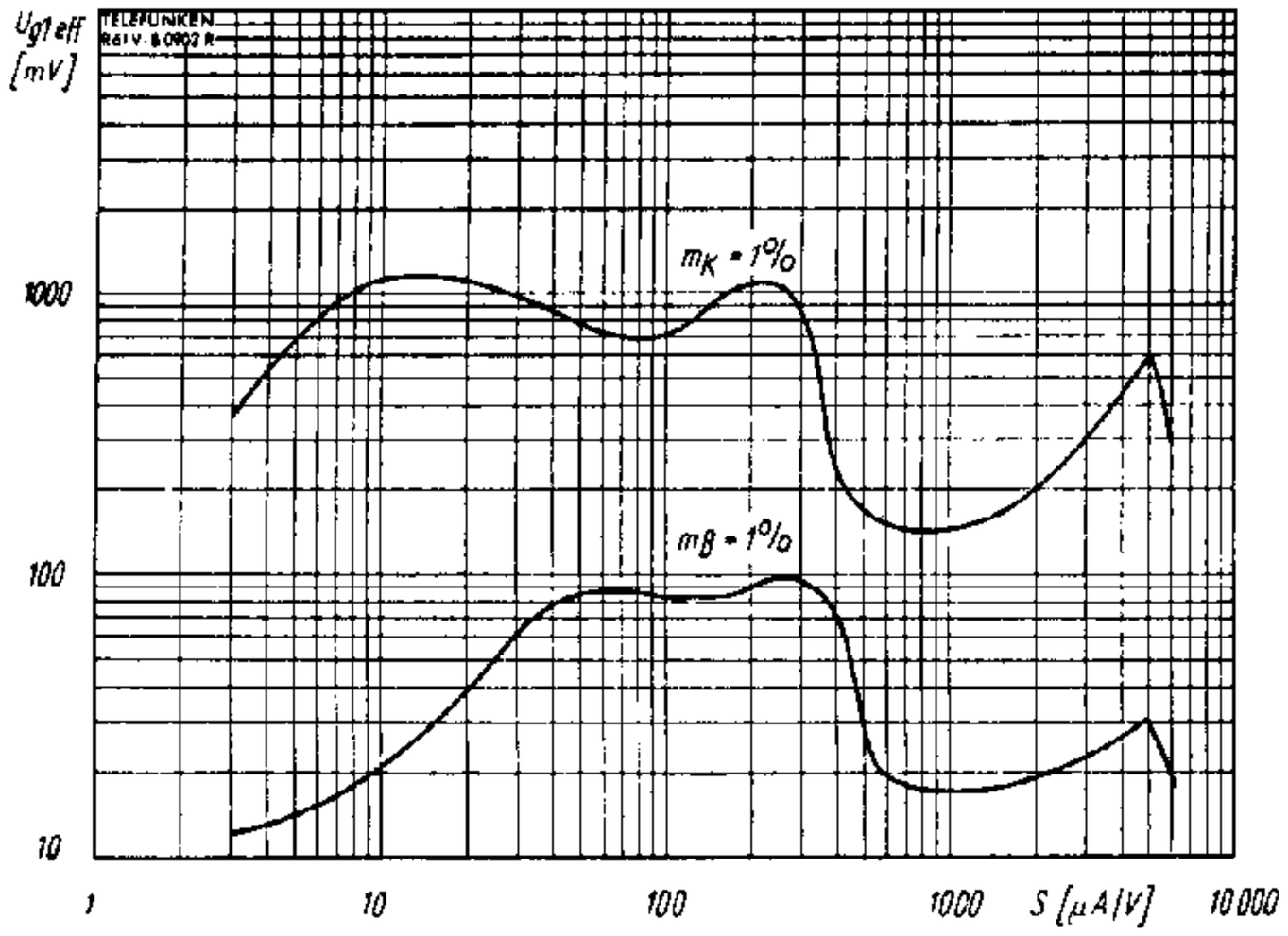
I_{R1} = Summe der Schirmgitterströme der Röhren EF 85 und ECH 81 in gemeinsamem Schirmgitter-Vorwiderstand R_1

I_{R1} = Sum of the screen-grid currents to the tubes EF 85 and ECH 81 in common screen-grid resistor R_1

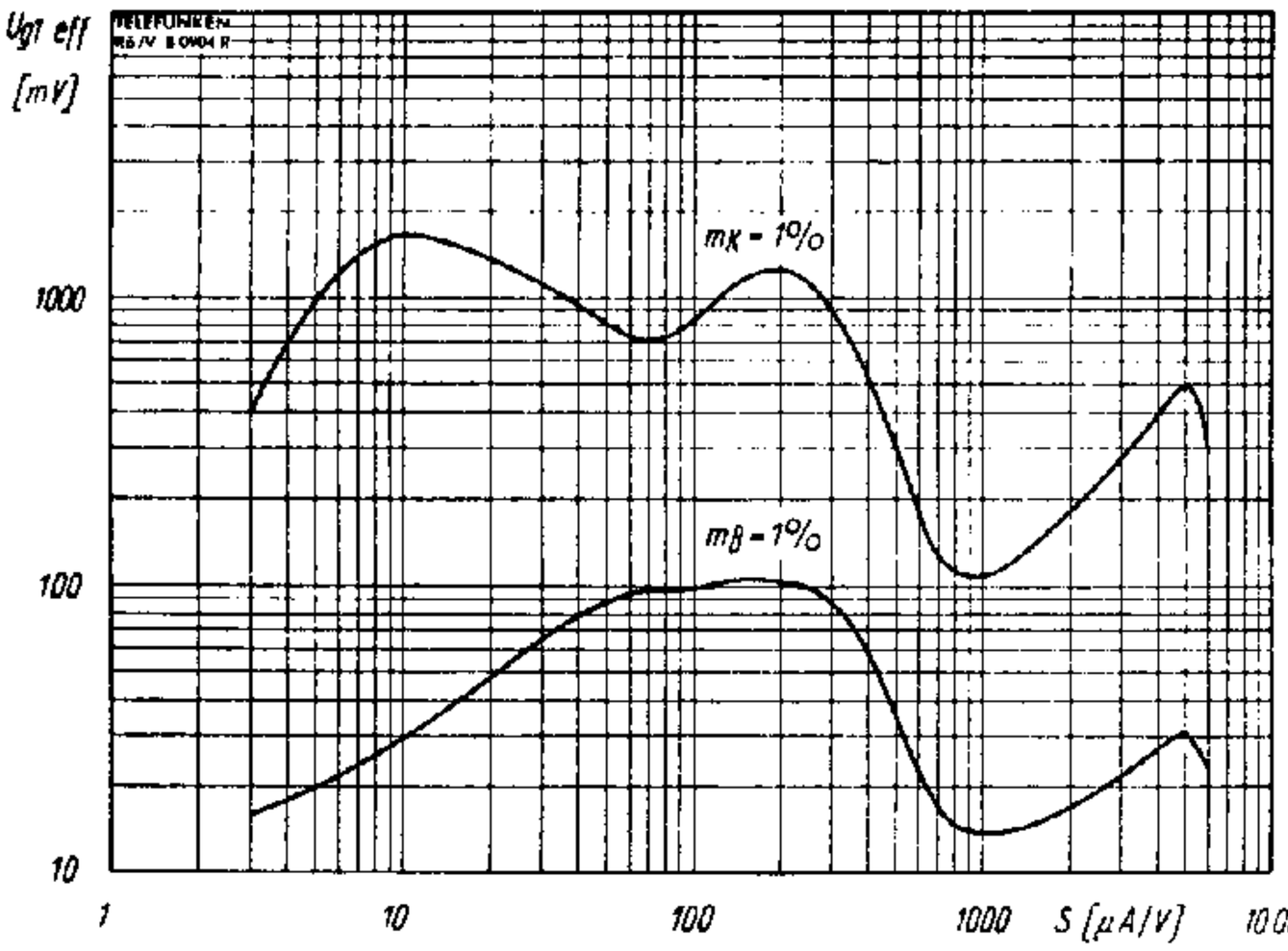
EF 85

TELEFUNKEN

Kurven für Kreuz- und Brumm-Modulation
Curves for cross- and hum modulation

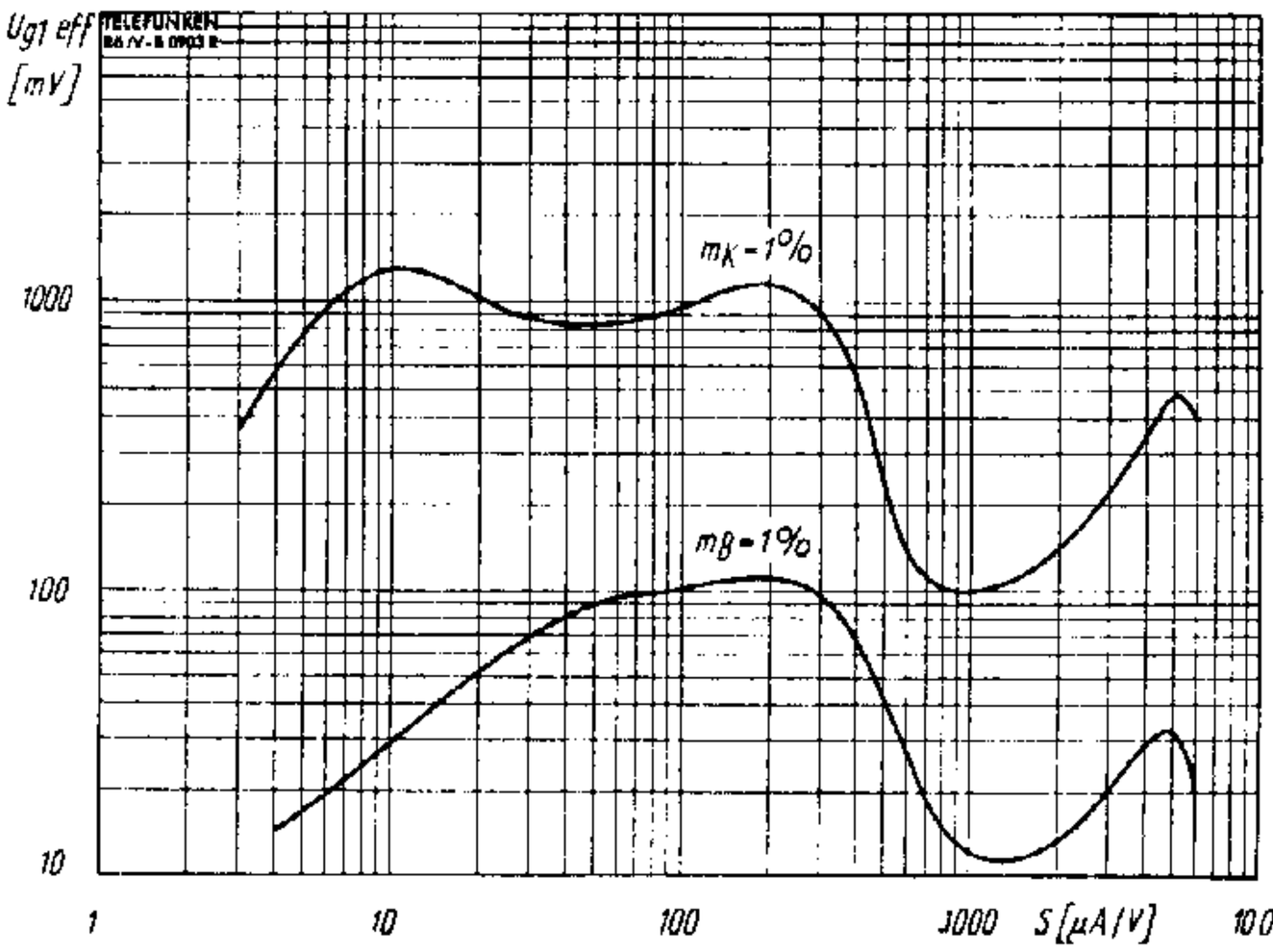


$U_a = U_b$ = 250 V
U_{g3} = 0 V
R_{g2} = 60 kΩ



$U_a = U_b$ = 250 V
U_{g3} = 0 V
R_1 = 18 kΩ

ECH 81 als Mischröhre
ECH 81 as Mixer



$U_a = U_b$ = 250 V
U_{g3} = 0 V
R_1 = 22 kΩ

ECH 81 als HF/ZF-Verstärker
ECH 81 as RF/IF-Amplifier

R_1 = gemeinsamer Schirmgitter-Vorwiderstand der Röhren EF 85 und ECH 81

R_1 = common screen-grid resistor of the tubes EF 85 and ECH 81