

Netzröhre für GW-Heizung
indirekt geheizt
Parallel- oder Serienspeisung

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

TELEFUNKEN

ECC 81

HF-Doppeltriode mit
getrennten Kathoden
RF-Twin-Triode with
separate cathodes

Heizfäden parallel geschaltet	U_f	6,3	V
Filaments connected in parallel	I_f	300	mA
Heizfäden in Serie geschaltet	U_f	12,6	V
Filaments connected in series	I_f	150	mA

Normierte Anheizzeit · Normalize heating-up time

Meß- und Betriebswerte

Measuring values and typical operation

per System

U_a	100	170	200	250	V
U_g	-1 ¹⁾	-1 ¹⁾	-1 ¹⁾	-2	V
I_a	3	8,5	11,5	10	mA
S	3,75	5,9	6,7	5,5	mA/V
μ	62	66	70	60	
R_i	16,5	11	10,5	11	k Ω

1) Bei dieser Einstellung kann Gitterstrom fließen. Wenn das unzulässig ist, empfiehlt sich die Einstellung mit $U_g = -1,5$ V.

With these operating conditions grid current is possible, if this is not admissible, a grid bias of -1.5 V must be taken.



Grenzwerte · Maximum ratings

per System

U_{ao}	550	V
U_a	300	V
N_a	2,5	W
I_k	15	mA
U_g	-50	V
$R_g (U_{g \text{ autom.}})$	1	M Ω
$U_{ge} (I_g \leq +0,3 \mu A)$	-1,3	V
$U_{f/k \text{ eff}}$	90	V
$R_{f/k}$	20	k Ω

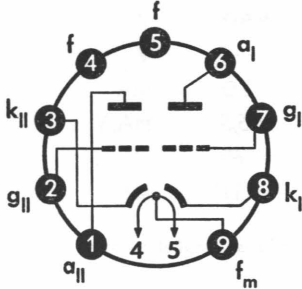
Kapazitäten · Capacitances

	System I	System II	
c_e	2,5	2,5	pF
c_a	0,45	0,35	pF
$c_{g/a}$	1,8	1,8	pF
$c_{f/k}$	2,4	2,4	pF
$c_{g/f}$	< 0,17	< 0,17	pF

Zwischen System I und System II
Between system I and system II

$c_{aI/aII}$	\leq	0,4	pF
$c_{gI/gII}$	\leq	0,005	pF
$c_{gI/aII}$	<	0,06	pF
$c_{gII/aI}$	<	0,06	pF

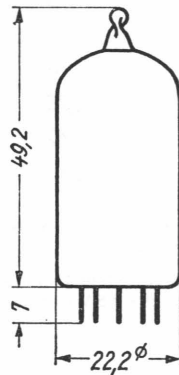
Sockelschaltbild
Base connection



Pico 9 · Noval

max. Abmessungen
max. dimensions

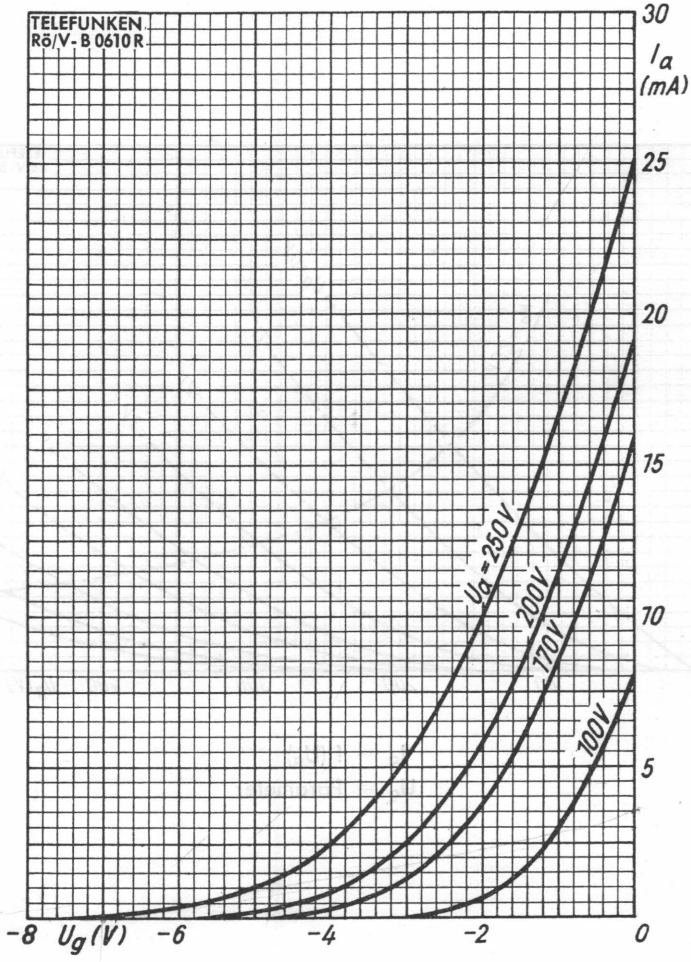
DIN 41 539, Nenngröße 40, Form A



Gewicht · Weight
max. 14 g

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

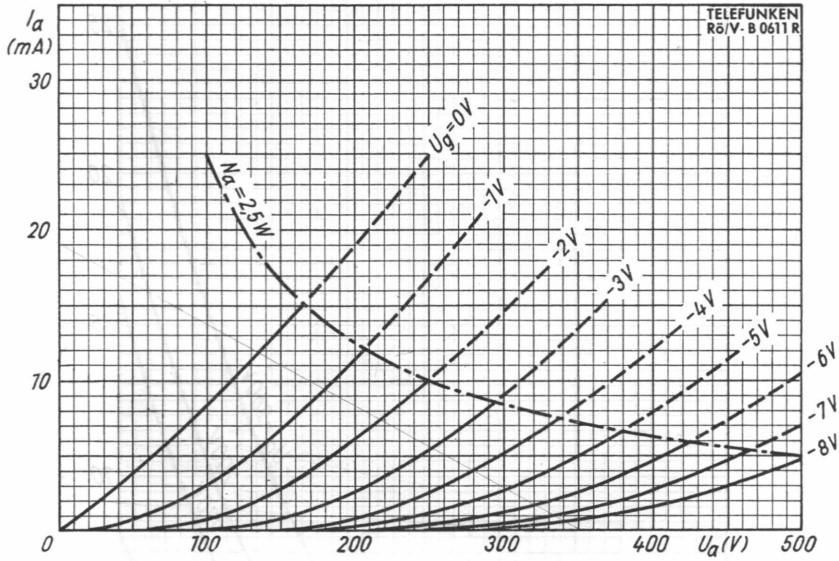




$I_a = f(U_g)$
 $U_a = \text{Parameter}$

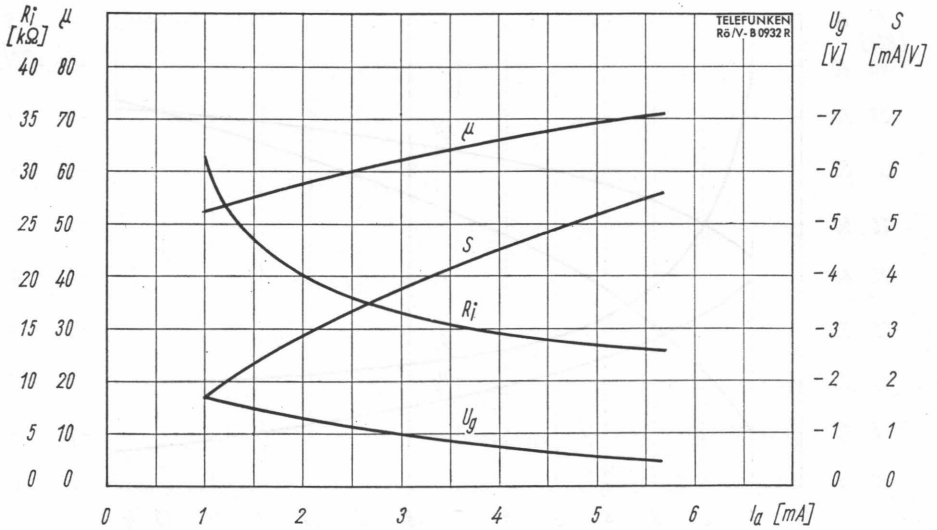


TELEFUNKEN

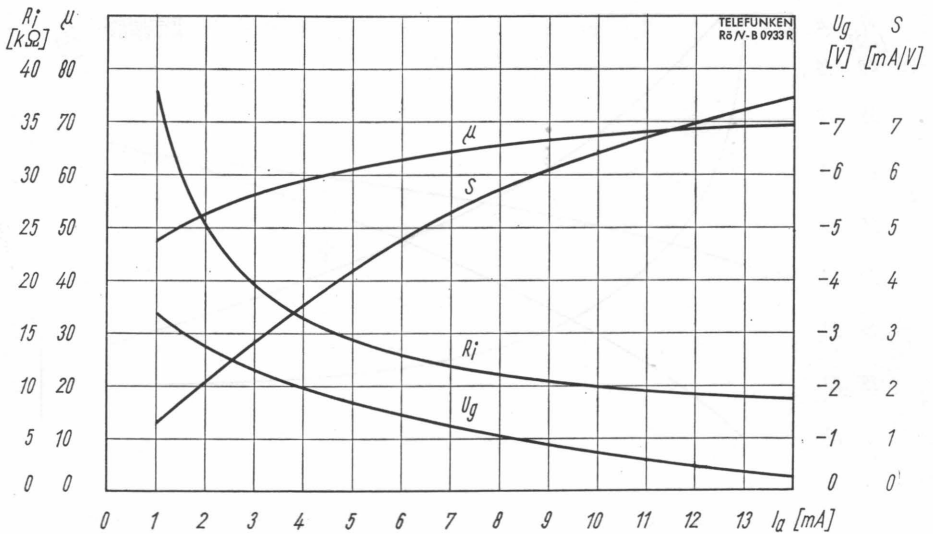


$I_a = f(U_a)$
 $U_g = \text{Parameter}$



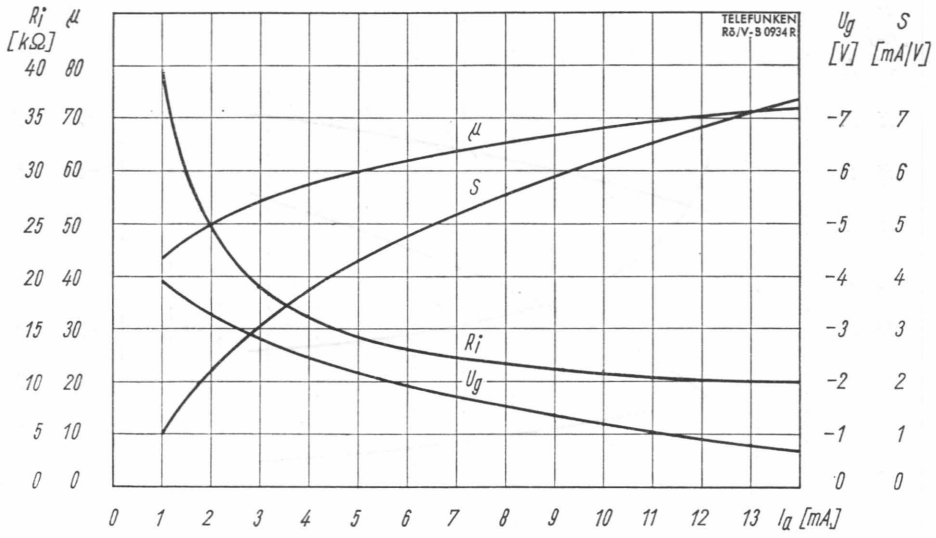


$S, \mu, R_i, U_g = f(I_a)$
 $U_a = 100 \text{ V}$

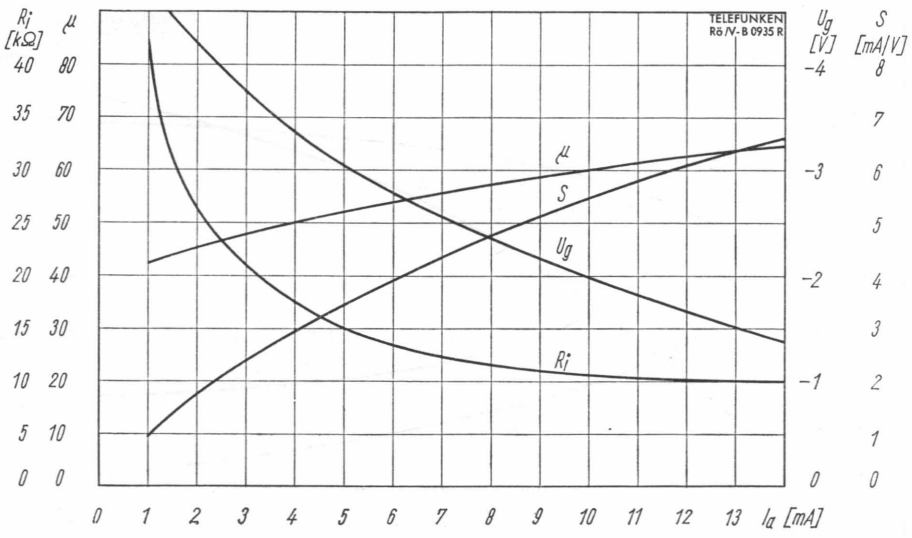


$S, \mu, R_i, U_g = f(I_a)$
 $U_a = 170 \text{ V}$



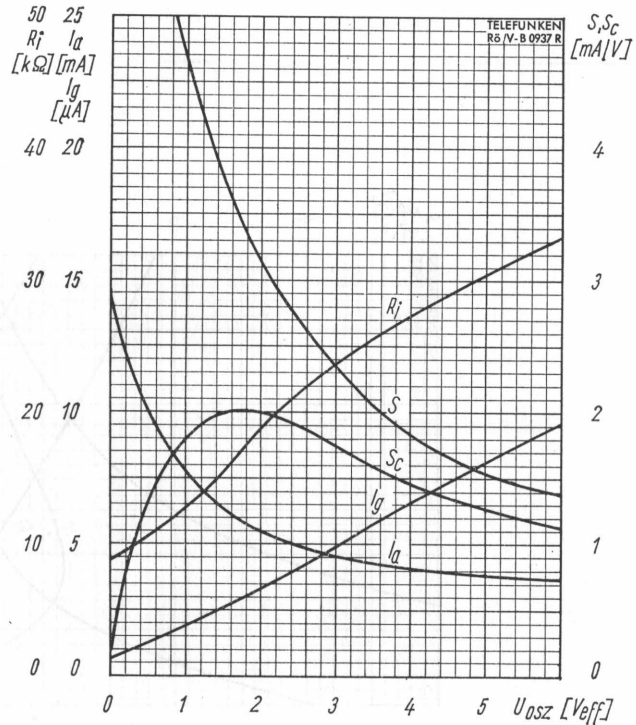
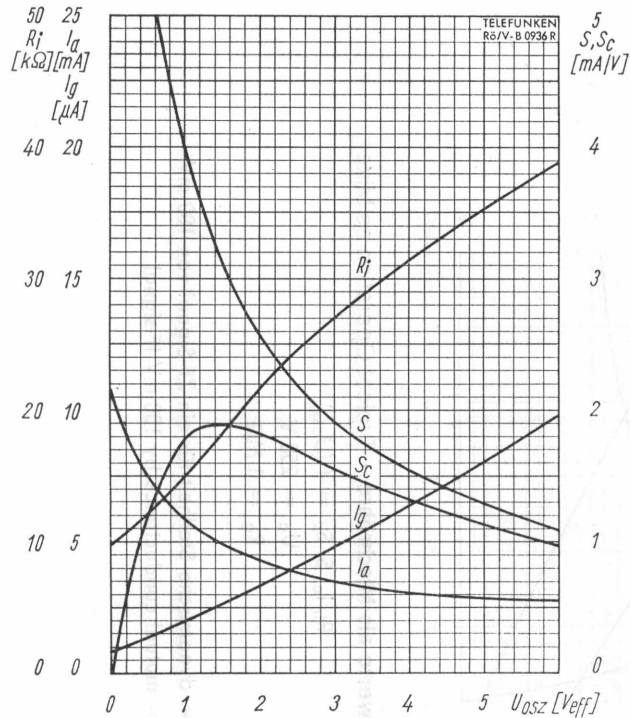


$S, \mu, R_i, U_g = f(I_a)$
 $U_a = 200\text{ V}$



$S, \mu, R_i, U_g = f(I_a)$
 $U_a = 250\text{ V}$





Betriebswerte als Mischröhre • Typical Operation as Mixer

$$R_i, I_a, S, S_c = f(U_{osz})$$

$$U_a = 170 \text{ V}$$

$$R_g = 1 \text{ M}\Omega$$

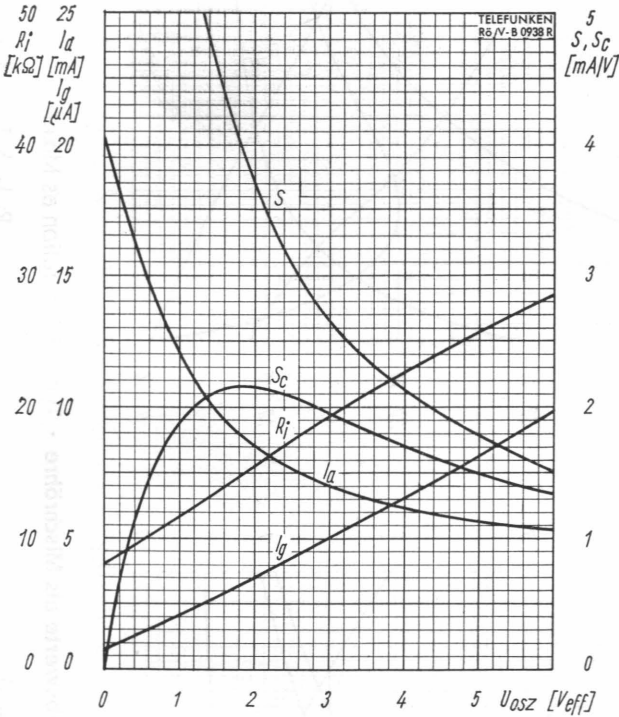
$$R_i, I_a, S, S_c = f(U_{osz})$$

$$U_a = 200 \text{ V}$$

$$R_g = 1 \text{ M}\Omega$$

S = dynamische Steilheit für ein ZF-Signal von 100 mV

S_c = mutual conductance by 100 mV IF-signal



Betriebswerte als Mischröhre • Typical Operation as Mixer

$$R_i, I_a, S, S_c = f(U_{osz})$$

$$U_a = 250 \text{ V}$$

$$R_g = 1 \text{ M}\Omega$$

S = dynamische Steilheit für ein ZF-Signal von 100 mV

S = mutual conductance by 100 mV IF-signal

