

Netzröhre für GW-Heizung  
indirekt geheizt  
Parallelspeisung  
DC-AC-Heating  
indirectly heated  
connected in parallel

# TELEFUNKEN

**E 55 L**  
**8233**

**Endpentode**  
**Power pentode**

## Vorläufige technische Daten · Tentative data

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <p><b>Z</b> <b>Zuverlässigkeit</b><br/>Der P-Faktor gibt den voraussichtlichen Röhrenausfall in Promille je 1000 Std. an. Er liegt bei ca. 1,5‰ je 1000 Std.</p> <p><b>LL</b> <b>Lange Lebensdauer</b><br/>Für diese Röhre wird eine Lebensdauer von 10.000 Std., gemittelt über 100 Röhren, garantiert.</p> <p><b>To</b> <b>Enge Toleranzen</b><br/>Bei dieser Röhre sind Streuungen der elektrischen Werte gegenüber Rundfunkröhren eingengt.</p> <p><b>Sto</b> <b>Stoß- und Vibrationsfestigkeit</b><br/>Die Röhre kann Schwingungen bis 2,5 g bei 50 Hz längere Zeit sowie Stoßbeschleunigungen bis 500 g kurzzeitig betriebssicher aufnehmen.</p> <p><b>Spk</b> <b>Zwischenschichtfreie Spezialkathode</b><br/>Die Spezialkathode dieser Röhre schließt das Entstehen einer störenden Zwischenschicht selbst dann aus, wenn sie längere Zeit bei eingeschalteter Heizung ohne Stromentnahme betrieben wird.</p> | <p><b>Reliability</b><br/>The factor P indicates how many of 1,000 tubes fail over an operating period of 1,000 hours. The figure is approx. 1.5‰ for each 1,000 hours.</p> <p><b>Long life</b><br/>For long-life tubes we guarantee 10,000 hours operation, averaged over 100 tubes.</p> <p><b>Tight tolerances</b><br/>In these tubes the tolerances of electrical ratings are reduced in comparison with receiving tubes.</p> <p><b>Vibration and shock proof</b><br/>The tube withstands accelerations of 2.5 g at 50 c/s for lengthy periods and momentary shocks of 500 g for short periods.</p> <p><b>Cathode free from interface</b><br/>The cathode establishes no interface even in cases where the heated tube is operated without plate current over lengthy periods.</p> |
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$U_f^{1)}$	<b>6,3</b>	V
$I_f$	<b>600 ± 40</b>	mA

## Meßwerte · Measuring values

$U_a$	<b>125</b>	V
$U_{g3}$	<b>0</b>	V
$U_{g2}$	<b>125</b>	V
$-U_{g1}$	<b>3</b>	V
$I_a$	<b>50</b>	mA
$I_{g2}$	<b>5,5</b>	mA
S	<b>45</b>	mA/V
$R_i$	<b>20</b>	k $\Omega$
$\mu_{g2g1}$	<b>30</b>	
$-I_{g1}$	<b>&lt; 1</b>	$\mu$ A
$r_e$ (50 MHz)	<b>1</b>	k $\Omega$

### Als Triode geschaltet Connected as triode

$g_2$ an a, $g_3$ an k		
$U_{ag2}$	<b>125</b>	V
$-U_{g1}$	<b>3</b>	V
$I_a$	<b>55,5</b>	mA
S	<b>50</b>	mA/V
$\mu$	<b>30</b>	

<sup>1)</sup> Die garantierte Lebensdauer gilt nur, wenn die Heizspannung in den Grenzen von  $\pm 5\%$  gehalten wird (absolute Grenzen).

The guaranteed life applies only if the filament voltage is kept in the limits  $\pm 5\%$  (absolute limits).



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**Betriebswerte · Typical operation**

$U_{ba}$	<b>140</b>	V
$U_{g3}$	<b>0</b>	V
$U_{bg2}$	<b>140</b>	V
$U_{bg1}$	<b>+12</b>	V
$R_k$	<b>270</b>	$\Omega$
$I_a$	50	mA
$I_{g2}$	5,5	mA
S	45	mA/V

**Absolute Grenzwerte**

Absolute maximum ratings

$U_{ba}$	<b>400</b>	V
$U_a$	<b>200</b>	V
$N_a$	<b>10</b>	W
$U_{bg2}$	<b>350</b>	V
$U_{g2}$	<b>175</b>	V
$N_{g2}$	<b>1,5</b>	W
$-U_{g1}$	<b>55</b>	V
$+U_{g1}$	<b>0</b>	V
$I_k$	<b>75</b>	mA
$R_{g1}$	<b>125</b>	k $\Omega$
$U_{f/k}$	<b>200</b>	V
tKolben	<b>180</b>	$^{\circ}\text{C}$

**Kapazitäten · Capacitances**

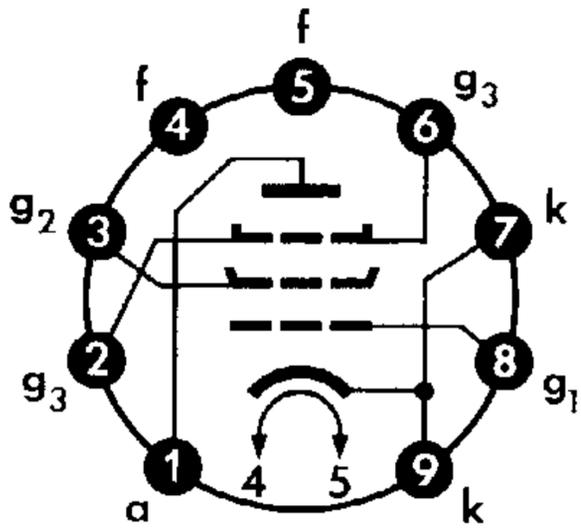
ohne äußere Abschirmung  
without external screening

mit äußerer Abschirmung  
Innen  $\phi = 30$  mm  
with external screening  
internal diameter = 30 mm

$C_i$	18	18	pF
$C_i (I_k = 55,5 \text{ mA})$	28	28	pF
$C_o$	4	6	pF
$C_{gt/a}$	0,11	0,08	pF

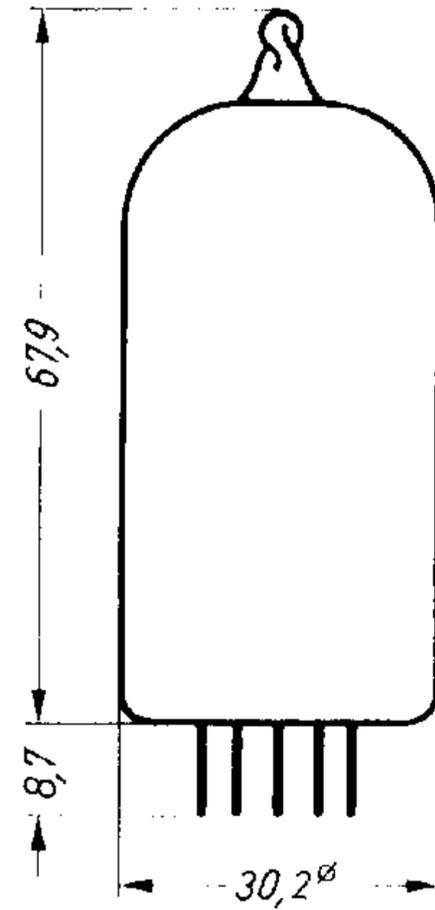


Sockelschaltbild  
Base connection



Magnoval

max. Abmessungen  
max. dimensions



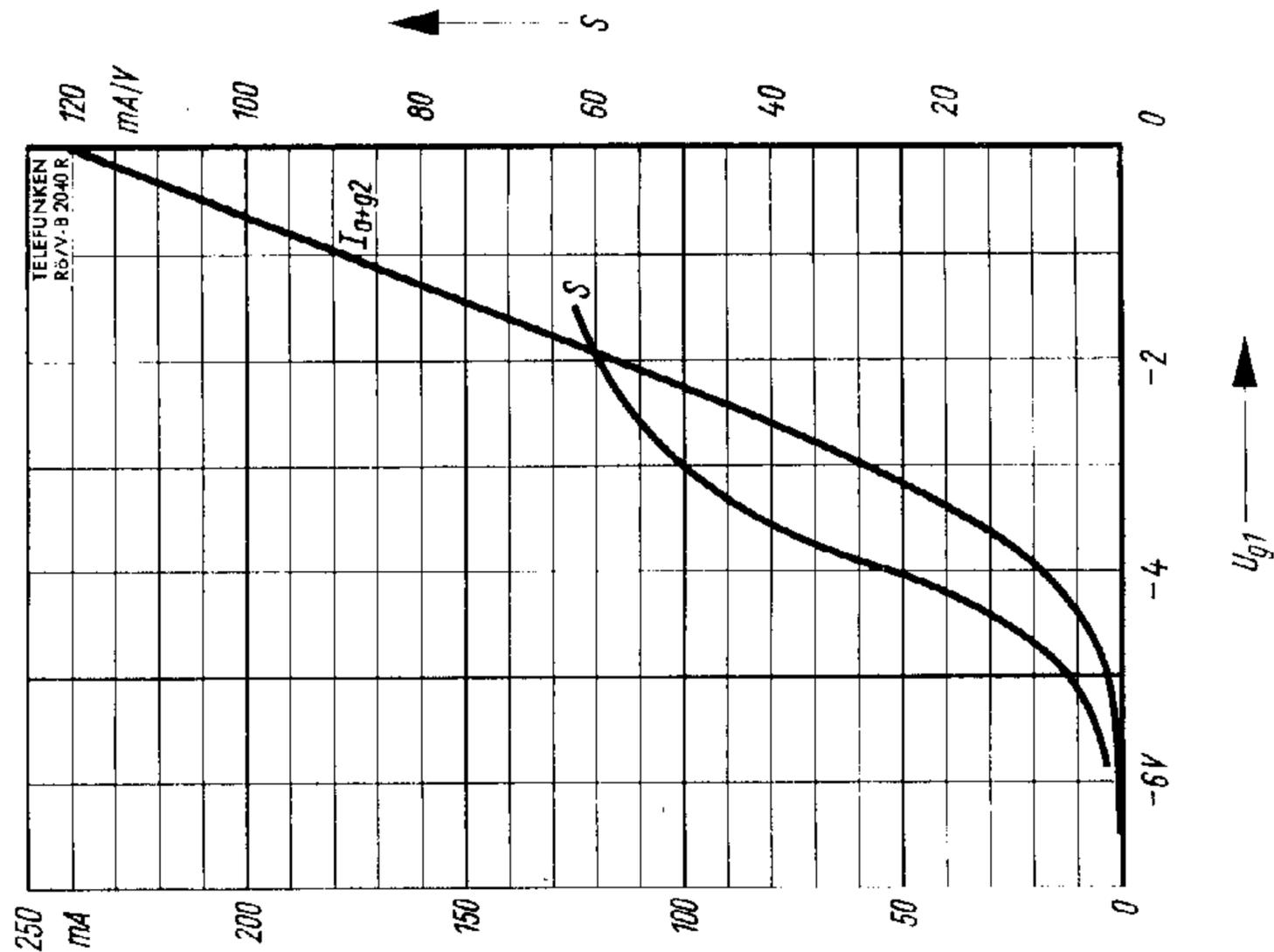
Gewicht · Weight  
max. 30 g

Einbaulage beliebig  
Mounting position any

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.

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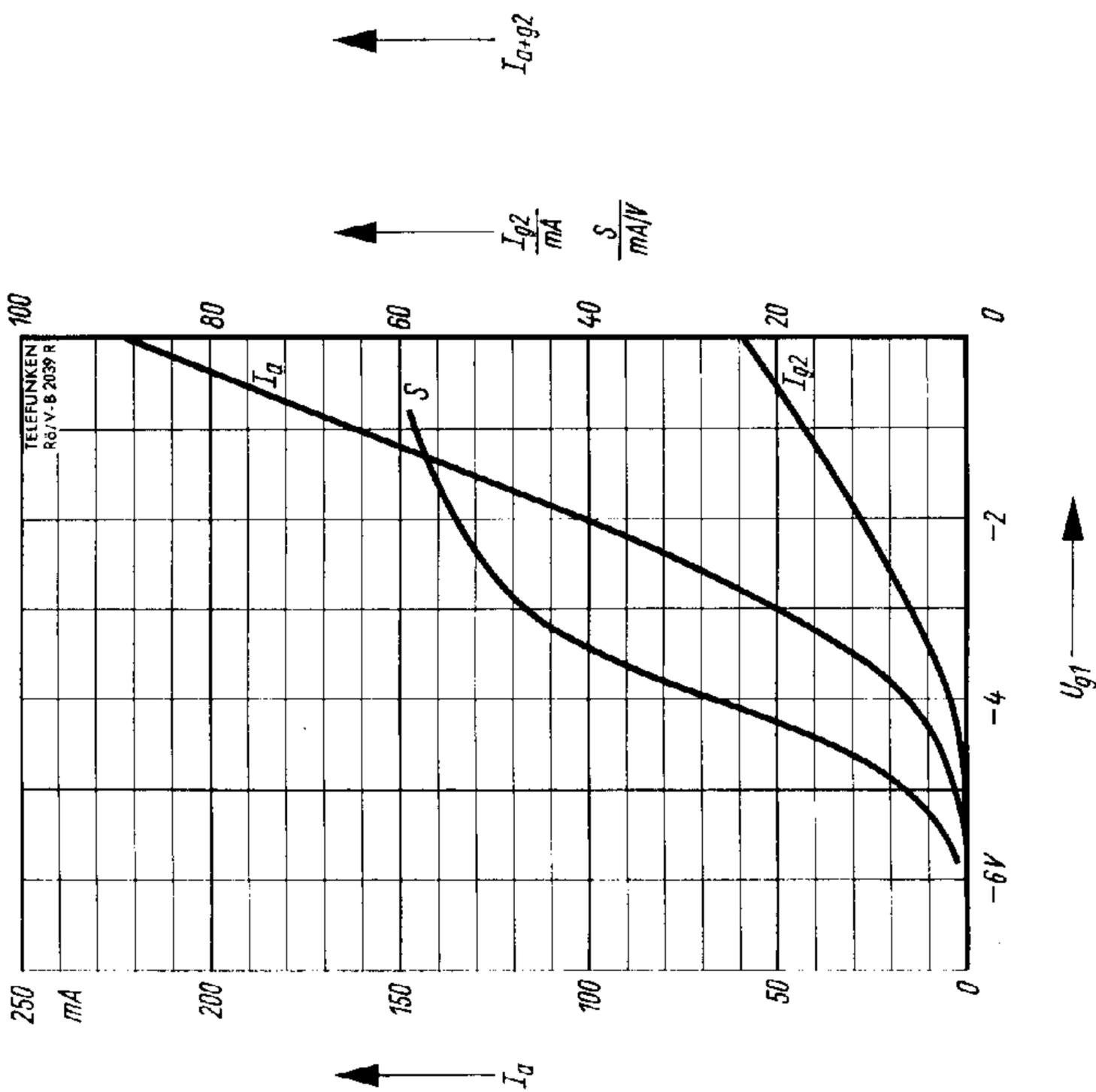
Als Triode geschaltet  
Connected as triode

$$I_{a+g2}, S = f(U_{g1})$$

$$U_a = 125 \text{ V}$$

$$U_{g2} = 125 \text{ V}$$

$$R_k = 0 \Omega$$



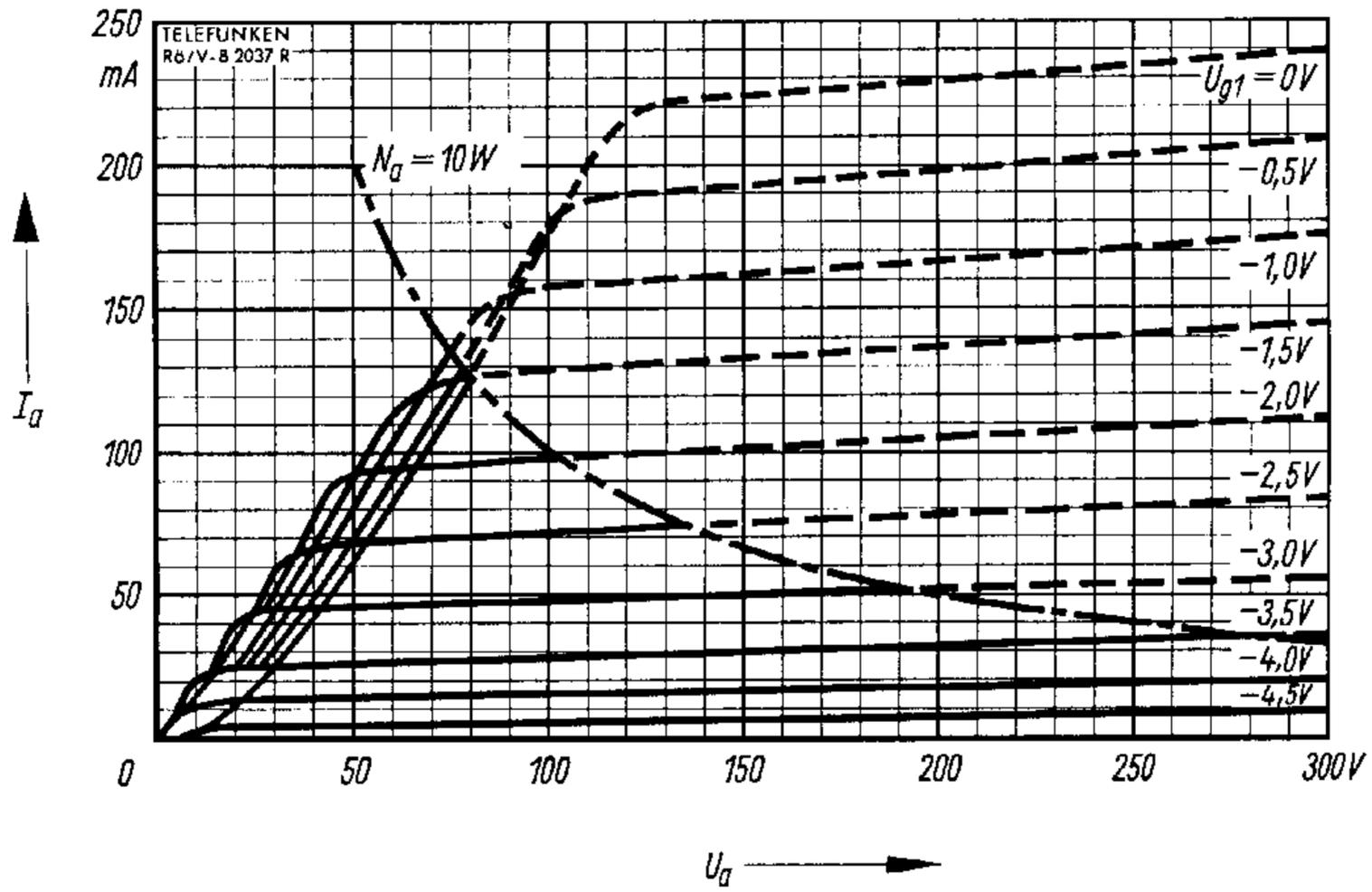
$$I_a, I_{g2}, S = f(U_{g1})$$

$$U_a = 125 \text{ V}$$

$$U_{g2} = 125 \text{ V}$$

$$R_k = 0 \Omega$$



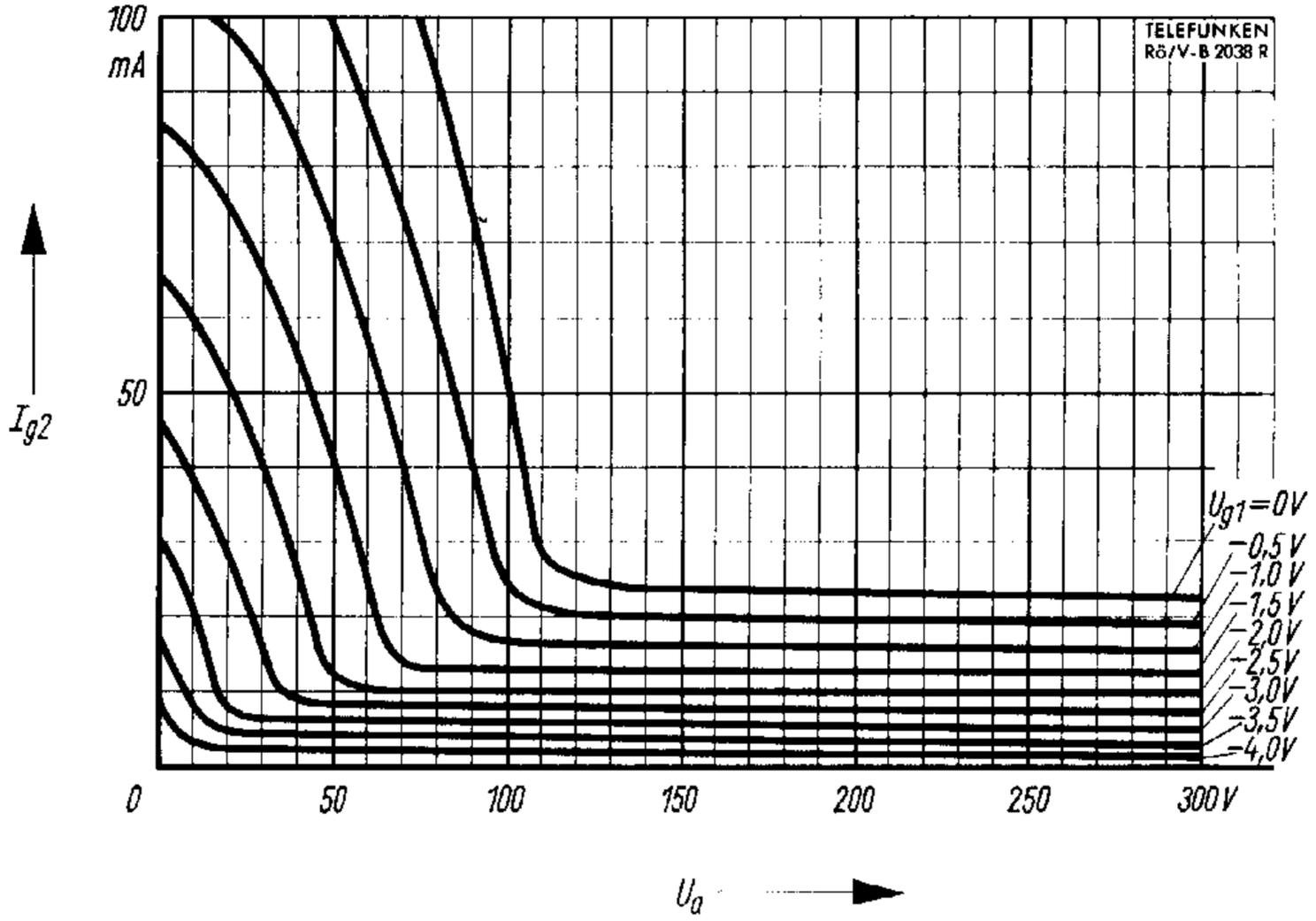


$$I_a = f(U_a)$$
$$U_{g2} = 125V$$
$$R_k = 0$$



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$$I_{g2} = f(U_a)$$
$$U_{g2} = 125 V$$
$$R_k = 0 \Omega$$

