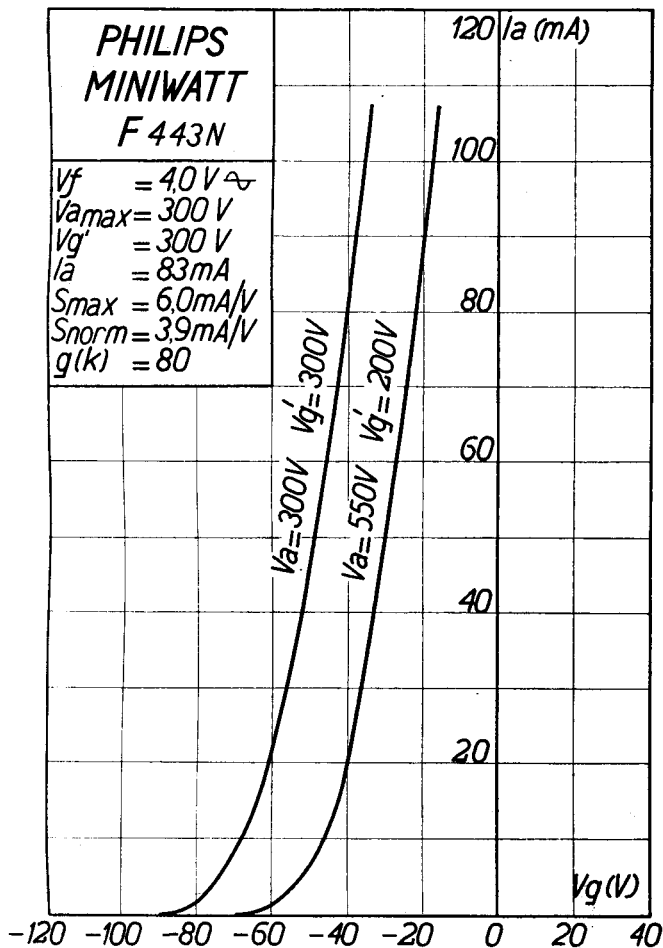


PHILIPS „MINIWATT“

Heizspannung	V_f	= 4,0 V
Tension de chauffage		
Filament voltage		
Heizstrom	I_f	ca.
Courant de chauffage		= env. 2,0 A
Filament current		appr.
Anodenspannung	$V_{a \max}$	= 300 V
Tension anodique		
Anode voltage		
Schirmgitterspannung	V_g'	= 300 V
Tension de grille-écran		
Screen-grid voltage		
Normaler Anodenstrom	I_a	= 83 mA
Courant anodique normal		
Normal anode current		
Neg. Gittervorspannung	V_g	ca.
Polarisation négative de grille		= env. 40 V
Negative grid bias		appr.
Verstärkungsfaktor	$g(k)$	= 80
Coefficient d'amplification		
Amplification factor		
Steilheit (max.)	$S_{\max}$	= 6 mA/V
Inclinaison (max.)		
Slope (max.)		
Steilheit (norm.)	S_{norm}	= 3,9 mA/V
Inclinaison (norm.)		
Slope (norm.)		
Innerer Widerstand (norm.)	R_i	= 20000 Ohm
Résistance intérieure (norm.)		
Internal resistance (norm.)		
Anodenverlustleistung	$W_{a \max.}$	= 25 W
Dissipation anodique		
Anode dissipation		
Max. Länge	l	= 160 mm
Longueur max.		
Overall length		
Grösster Durchmesser	d	= 67 mm
Diamètre max.		
Max. diameter		
Sockel		= 0 40
Culot		
Base		
Sockelschaltung		= S. VIII
Connexion du culot		
Base connection		
Anwendung: Endstufe		
Application: Tube final		
Function: Power valve		

**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0\text{ V} \approx$
 $V_{a\text{max}} = 300\text{ V}$
 $V_{g'} = 300\text{ V}$
 $I_a = 83\text{ mA}$
 $S_{\text{max}} = 6,0\text{ mA/V}$
 $S_{\text{norm}} = 3,9\text{ mA/V}$
 $g(k) = 80$



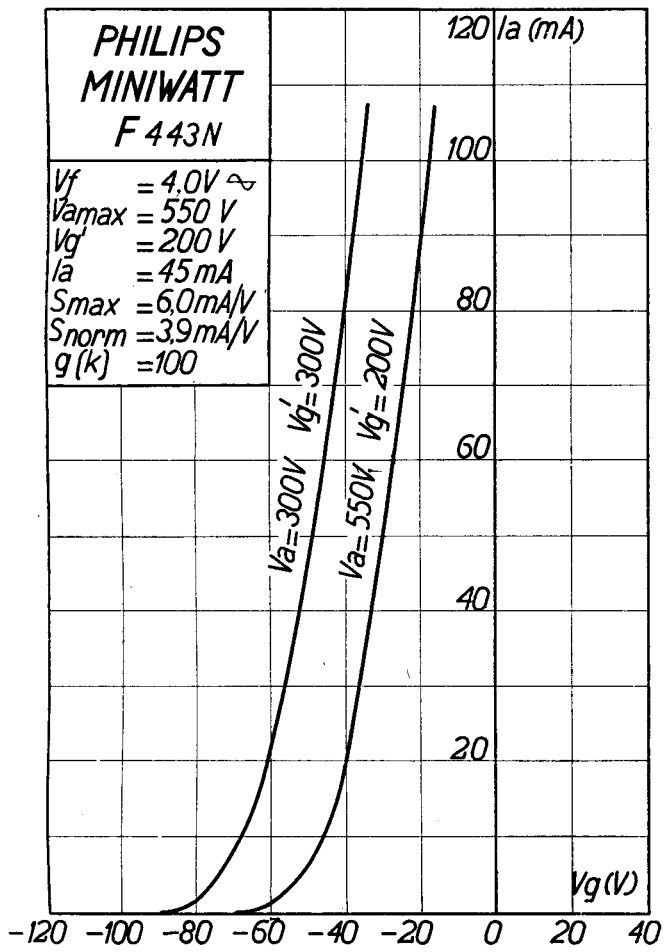
PHILIPS „MINIWATT“

Heizspannung		
Tension de chauffage	v_f	= 4,0 V
Filament voltage		
Heizstrom		
Courant de chauffage	i_f	= 2,0 A
Filament current		
Anodenspannung		
Tension anodique	$v_{a \max.}$	= 550 V
Anode voltage		
Schirmgitterspannung		
Tension de grille-écran	$v_{g'}$	= 200 V
Screen-grid voltage		
Normaler Anodenstrom		
Courant anodique normal	i_a	= 45 mA
Normal anode current		
Neg. Gittervorspannung		ca.
Polarisation négative de grille	v_g	env. 30 V
Negative grid bias		appr.
Verstärkungsfaktor		
Coefficient d'amplification	$g(k)$	= 100
Amplification factor		
Steilheit (max.)		
Inclinaison (max.)	$S_{\max.}$	= 6 mA/V
Slope (max.)		
Steilheit (norm.)		
Inclinaison (norm.)	$S_{\text{norm.}}$	= 3,9 mA/V
Slope (norm.)		
Innerer Widerstand (norm.)		
Résistance intérieure (norm.)	R_i	= 25000 Ohm
Internal resistance (norm.)		
Anodenverlustleistung		
Dissipation anodique	$w_{a \max.}$	= 25 W
Anode dissipation		
Max. Länge		
Longueur max.	l	= 160 mm
Overall length		
Grösster Durchmesser		
Diamètre max.	d	= 67 mm
Max. diameter		
Sockel		
Culot		= 0 40
Base		
Sockelschaltung		
Connexion du culot		= S. VIII
Base connection		

Anwendung: Endstufe
 Application: Tube final
 Function: Power valve

**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0V \approx$
 $V_{amax} = 550V$
 $V_{g'} = 200V$
 $I_a = 45mA$
 $S_{max} = 6,0mA/V$
 $S_{norm} = 3,9mA/V$
 $g(k) = 100$



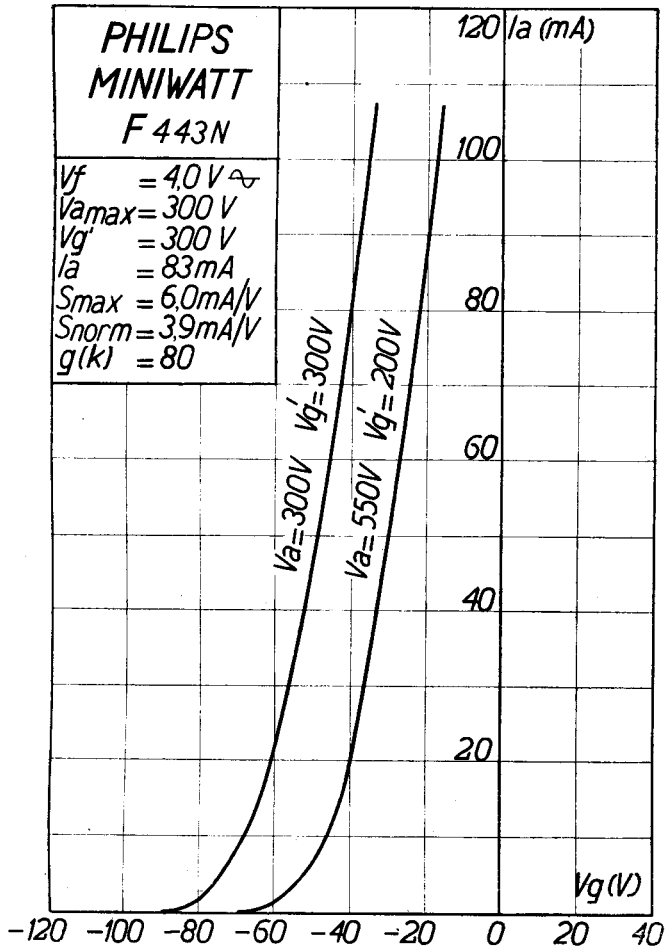
PHILIPS „MINIWATT“

Heizspannung	v_f	= 4,0 V
Tension de chauffage		
Filament voltage		
Heizstrom	i_f	ca.
Courant de chauffage		= env. 2,0 A
Filament current		appr.
Anodenspannung	$v_a \text{ max.}$	= 300 V
Tension anodique		
Anode voltage		
Schirmgitterspannung	v_g'	= 300 V
Tension de grille-écran		
Screen-grid voltage		
Normaler Anodenstrom	i_a	= 83 mA
Courant anodique normal		
Normal anode current		
Neg. Gittervorspannung	v_g	ca.
Polarisation négative de grille		= env. 40 V
Negative grid bias		appr.
Verstärkungsfaktor	$g(k)$	= 80
Coefficient d'amplification		
Amplification factor		
Steilheit (max.)	$S_{\text{max.}}$	= 6 mA/V
Inclinaison (max.)		
Slope (max.)		
Steilheit (norm.)	$S_{\text{norm.}}$	= 3,9 mA/V
Inclinaison (norm.)		
Slope (norm.)		
Innerer Widerstand (norm.)	R_i	= 20000 Ohm
Résistance intérieure (norm.)		
Internal resistance (norm.)		
Anodenverlustleistung	$w_{a\text{max.}}$	= 25 W
Dissipation anodique		
Anode dissipation		
Max. Länge	l	= 160 mm
Longueur max.		
Overall length		
Grösster Durchmesser	d	= 67 mm
Diamètre max.		
Max. diameter		
Sockel		= 0 40
Culot		
Base		
Sockelschaltung		= S VIII
Connexion du culot		
Base connection		

Anwendung: Endstufe
 Application: Tube final
 Function: Power valve

**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0 \text{ V} \approx$
 $V_{a\max} = 300 \text{ V}$
 $V_{g'} = 300 \text{ V}$
 $I_a = 83 \text{ mA}$
 $S_{\max} = 6,0 \text{ mA/V}$
 $S_{\text{norm}} = 3,9 \text{ mA/V}$
 $g(k) = 80$



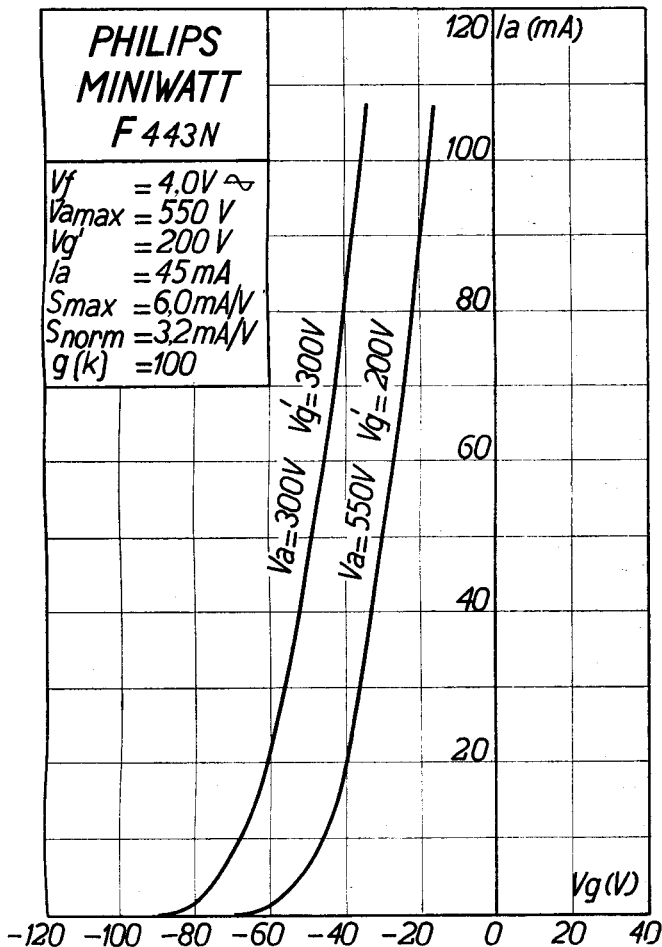
PHILIPS „MINIWATT“

Heizspannung	v_f	= 4,0 V
Tension de chauffage		
Filament voltage		
Heizstrom		ca.
Courant de chauffage	i_f	= env. 2,0 A
Filament current		appr.
Anodenspannung	v_a max.	= 550 V
Tension anodique		
Anode voltage		
Schirmgitterspannung	$v_{g'}$	= 200 V
Tension de grille-écran		
Screen-grid voltage		
Normaler Anodenstrom	i_a	= 45 mA
Courant anodique normal		
Normal anode current		
Neg. Gittervorspannung	v_g	= ca.
Polarisation négative de grille		= env. 30 V
Negative grid bias		appr.
Verstärkungsfaktor	$g(k)$	= 100
Coefficient d'amplification		
Amplification factor		
Steilheit (max.)	$S_{max.}$	= 6 mA/V
Inclinaison (max.)		
Slope (max.)		
Steilheit (norm.)	$S_{norm.}$	= 3,2 mA/V
Inclinaison (norm.)		
Slope (norm.)		
Innerer Widerstand (norm.)	R_i	= 30000 Ohm
Résistance intérieure (norm.)		
Internal resistance (norm.)		
Anodenverlustleistung	$w_{amax.}$	= 25 W
Dissipation anodique		
Anode dissipation		
Max. Länge	l	= 160 mm
Longueur max.		
Overall length		
Grösster Durchmesser	d	= 67 mm
Diamètre max.		
Max. diameter		
Sockel		= 0 40
Culot		
Base		
Sockelschaltung		= S VIII
Connexion du culot		
Base connection		

Anwendung: Endstufe
 Application: Tube final
 Function: Power valve

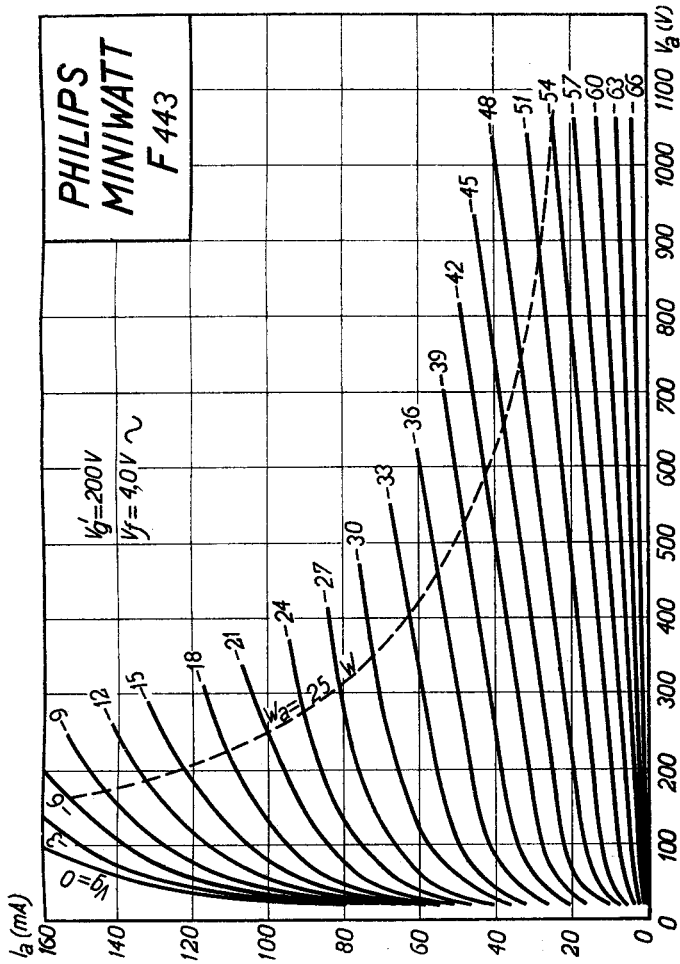
**PHILIPS
MINIWATT
F 443N**

$V_f = 4.0V \approx$
 $V_{amax} = 550V$
 $V_g' = 200V$
 $I_a = 45mA$
 $S_{max} = 6.0mA/V$
 $S_{norm} = 3.2mA/V$
 $g(k) = 100$



PHILIPS „MINIWATT“

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 550 V
Max. anode voltage		
Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		
Max. Kathodenstrom	I_c	= 90 mA
Courant cathodique max.		
Max. cathode current		
Max. Schirmgitterspannung	$V_{g'0}$	= 900 V
Tension de grille-écran max.	$V_{g'}$	= 200 V
Max. screen-grid voltage		
Max. Schirmgitterbelastung	W_g	= 1,8 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		
Mittlerer Schirmgitterstrom	I_g	= 6,5 mA
Courant de grille-écran moyen		
Average screen-grid current		
Ungefähre Grenzw. des Schirmgitterstr.	$I_{g'}^{j \min.}$	= 3,5 mA
Limites approx. du cour. de gr.-écran	$I_{g'}^{j \max.}$	= 8,5 mA
Approx. limits of screen-grid current		
Gitterstrom-Einsatzpunkt	V_{gi}	= -2 V
Point de commenc. du courant de grille		
Starting point of grid current		
Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M.Ωhm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M.Ωhm
Max. resistance in grid circuit		
Nutzleistung	$W_{0.2} (V_{geff} = 11,5 \text{ V})$	= 7,6 W
Puissance utile	$(R_a = 14000 \text{ Ωhm})$	
Output	$W_{0.2} (V_{geff} = 16,2 \text{ V})$	= 11,5 W
	$(R_a = 14000 \text{ Ωhm})$	
Kapazitäten	C_{ag}	= 3 $\mu\mu\text{F}$
Capacités	C_{ak}	= 12 $\mu\mu\text{F}$
Capacities	C_{gk}	= 14,6 $\mu\mu\text{F}$



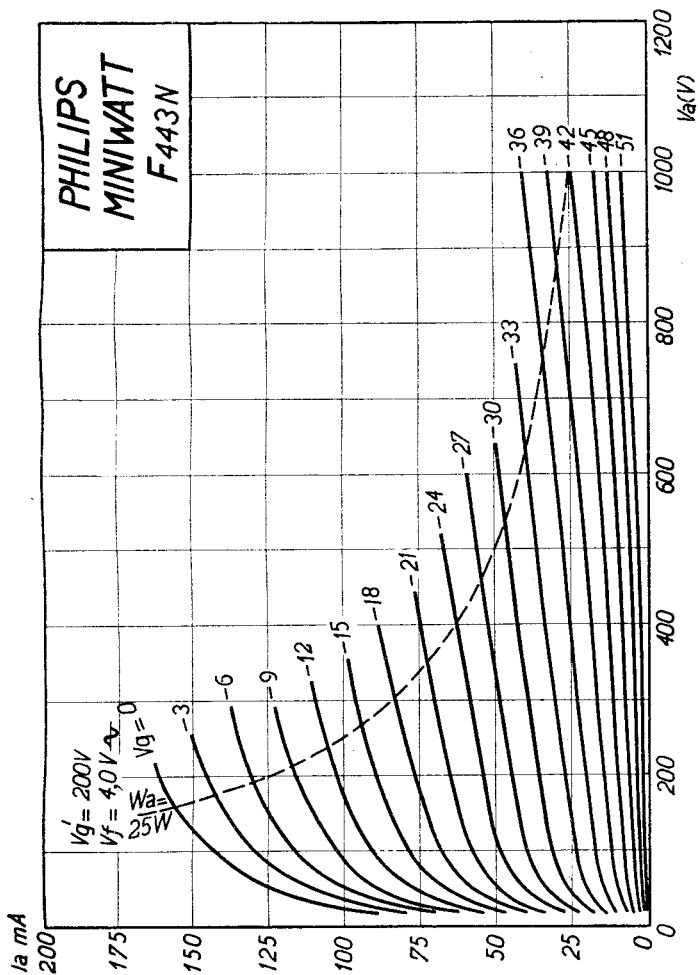
PHILIPS „MINIWATT“

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 550 V
Max. anode voltage		
Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		
Max. Kathodenstrom	I_c	= 100 mA
Courant cathodique max.		
Max. cathode current		
Max. Schirmgitterspannung	V_g^I	= 500 V
Tension de grille-écran max.	V_g^{I0}	= 200 V*)
Max. screen-grid voltage		
Max. Schirmgitterbelastung	W_g^I	= 2,0 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		
Mittlerer Schirmgitterstrom	I_g^I	= 1,4 mA
Courant de grille-écran moyen		
Average screen-grid current		
Ungefähre Grenzw. des Schirmgitterstr.	$I_g^I \min.$	= 0,4 mA
Limites approxim. du cour. de gr.-écran	$I_g^I \max.$	= 2,2 mA
Approx. limits of screen-grid current		
Gitterstrom-Einsatzpunkt	V_{gi}	
Point de commenc. du courant de grille	$(V_f = 4 \text{ V} \wedge \searrow)$	= -2 V
Starting point of grid current		
Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M. Ohm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M. Ohm
Max. resistance in grid circuit		
Nutzleistung	$W_{01} (V_{g \text{ eff}} = 11 \text{ V})$	= 8 W
Puissance utile	$(R_a = 12000 \Omega)$	
Output	$W_{02} (V_{g \text{ eff}} = 16 \text{ V})$	= 13,4 W
	$(R_a = 12000 \Omega)$	
Kapazitäten	C_{ag}	= 1,1 $\mu\mu\text{F}$
Capacités	C_{ak}	= 13,7 $\mu\mu\text{F}$
Capacities	C_{gk}	= 15,5 $\mu\mu\text{F}$

*) $V_{g'}$ muss einem Potentiometer entnommen werden.

$V_{g'}$ doit être dérivée d'un potentiomètre.

$V_{g'}$ must be derived from potentiometer.



PHILIPS „MINIWATT“

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 300 V
Max. anode voltage		
Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		
Max. Kathodenstrom	I_c	= 100 mA
Courant cathodique max.		
Max. cathode current		
Max. Schirmgitterspannung	$V_{g^1}^o$	= 500 V
Tension de grille-écran max.	V_g	= 300 V
Max. screen-grid voltage		
Max. Schirmgitterbelastung	W_{g^1}	= 2,0 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		
Mittlerer Schirmgitterstrom	I_{g^1}	= 4,6 mA
Courant de grille-écran moyen		
Average screen-grid current		
Ungefähre Grenzw. des Schirmgitterstr.	$I_{g^1}^1 \text{ min.}$	= 2 mA
Limites approxim. du cour. de gr.-écran	$I_{g^1}^1 \text{ max.}$	= 6,5 mA
Approx. limits of screen-grid current		
Gitterstrom-Einsatzpunkt	$V_{(V_f = 4 \text{ V} \searrow)}$	= -2 V
Point de commenc. du courant de grille		
Starting point of grid current		
Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M.Ohm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M.Ohm
Max. resistance in grid circuit		
Nutzleistung	$W_{o1} (V_{g^1 \text{ eff}} = 16,5 \text{ V})$	= 8,6 W
Puissance utile	$(R_a = 3500 \Omega)$	
Output	$W_{o2} (V_{g^1 \text{ eff}} = 23,5 \text{ V})$	= 12,9 W
	$(R_a = 3500 \Omega)$	
Kapazitäten	C_{ag}	= 1,1 $\mu\mu\text{F}$
Capacités	C_{ak}	= 13,7 $\mu\mu\text{F}$
Capacities	C_{gk}	= 15,5 $\mu\mu\text{F}$

I_a (mA)

