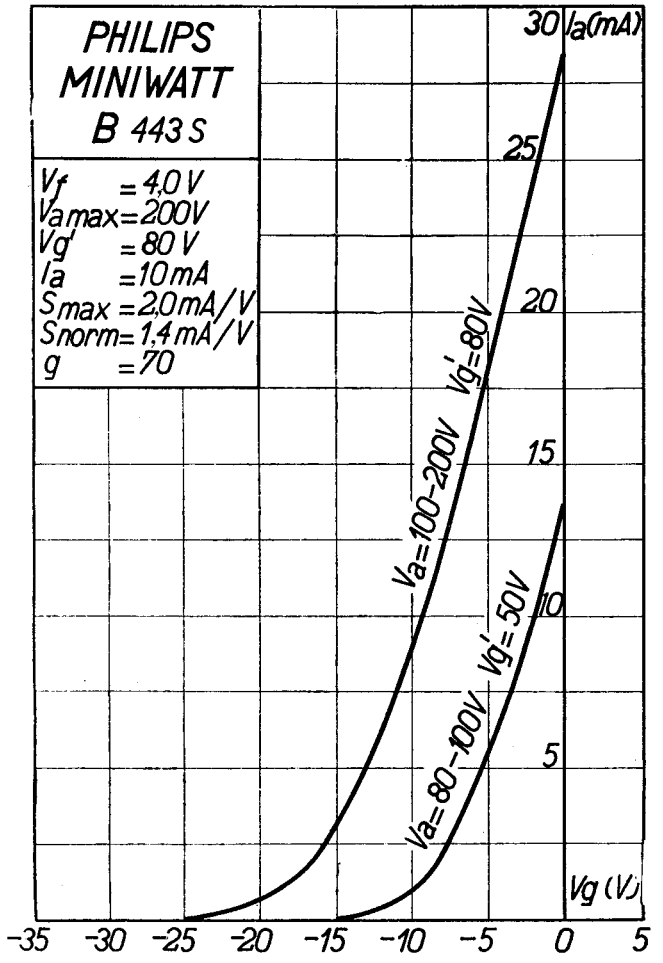
B 443S

PHILIPS „MINIWATT"

Heizspannung Tension de chauffage Filament voltage	v_f	=	4,0 V
Heizstrom Courant de chauffage Filament current	i_f	=	C,150 A
Anodenspannung Tension anodique Anode voltage	$v_{a\ max.}$	=	200 V
Schirmgitterspannung Tension de grill-écran Screen-grid voltage	$v_{g'}$	=	80 V
Normaler Anodenstrom Courant anodique normal Normal anode current	i_a	=	10 mA
Neg. Gitterspannung Polarisation négative de grille Negative grid bias	v_g	=	ca. env. 10 V appr.
Verstärkungsfaktor Coefficient d'amplification Amplification factor	$g\,(k)$	=	70
Steilheit (max.) Inclinaison (max.) Slope (max.)	$S_{\text{max.}}$	=	2,0 mA/V
Steilheit (norm.) Inclinaison (norm.) Slope (norm.)	$S_{\text{norm.}}$	=	1,4 mA/V
Innerer Widerstand (norm.) Résistance intérieure (norm.) Internal resistance (norm.)	R_i	=	50000 Ohm
Max. Länge Longueur max. Overall length	l	=	92 mm
Grösster Durchmesser Diamètre max. Max. diameter	d	=	51 mm
Sockel Culot Base		=	O 35
Sockelschaltung Connexion du culot Base connection		=	S VIII

Anwendung: Endstufe
Application: Tube final
Function: Power valve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B 443 S
Vf = 4,0 V
Va max = 200V
Vg' = 80 V
Ia = 10 mA
S max = 2,0 mA/V
S norm = 1,4 mA/V
g = 70
Ia (mA)
30
25
20
15
10
5
Vg (V)
-35
-30
-25
-20
-15
-10
-5
0
5
Va = 100-200V
Vg' = 80V
Va = 80-100V
Vg' = 50V

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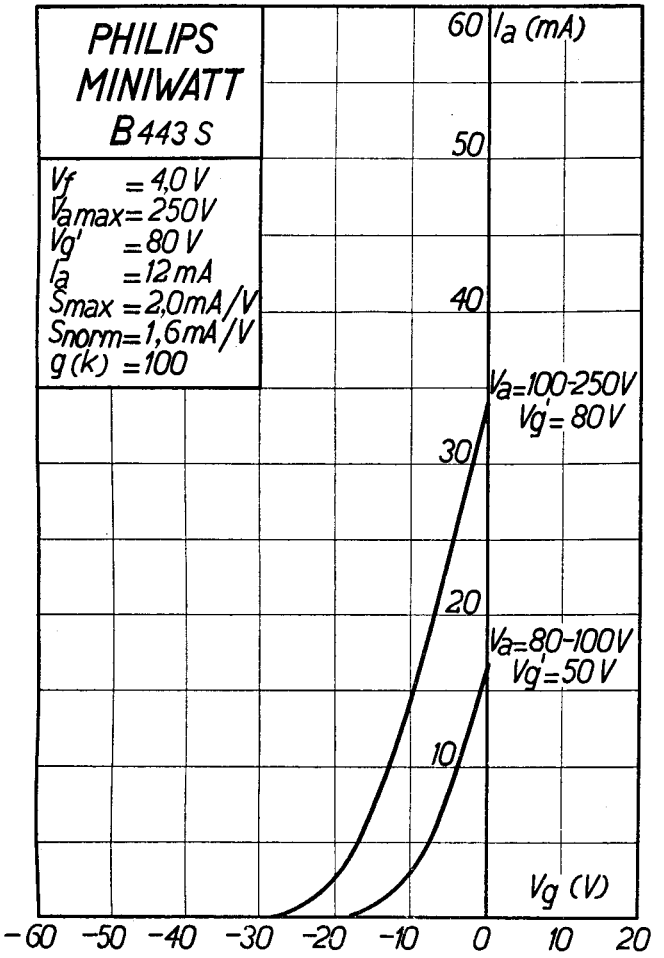
PHILIPS „MINIWATT"

Heizspannung Tension de chauffage Filament voltage	V_f	=	4,0 V
Heizstrom Courant de chauffage Filament current	I_f	=	0,15 A
Anodenspannung Tension anodique Anode voltage	$V_{a\,max.}$	=	250 V
Hilfsgitterspannung Tension auxiliaire de grille Auxiliary-grid voltage	$V_g{}'$	=	80 V
Normaler Anodenstrom Courant anodique normal Normal anode current	I_a	=	12 mA
Neg. Gittervorspannung Polarisation négative de grille Negative grid bias	V_g	=	ca. env. 12 V appr.
Verstärkungsfaktor Coefficient d'amplification Amplification factor	$g(k)$	=	100
Steilheit (max.) Inclinaison (max.) Slope (max.)	$S_{max.}$	=	2,0 mA/V
Steilheit (norm.) Inclinaison (norm.) Slope (norm.)	$S_{norm.}$	=	1,6 mA/V
Innerer Widerstand (norm.) Résistance intérieure (norm.) Internal resistance (norm.)	R_i	=	60.000 Ohm
Max. Länge Longueur max. Overall length	l	=	92 mm
Grösster Durchmesser Diamètre max. Max. diameter	d	=	51 mm
Sockel Culot Base		=	0 35
Sockelschaltung Connexion du culot Base connection		=	S VIII

Anwendung: Endstufe
Application: Tube final
Function: Power valve


PHILIPS
MINIWATT
B443 S
Vf = 4,0 V
Vamax = 250V
Vg' = 80 V
Ia = 12 mA
Smax = 2,0mA/V
Snorm = 1,6mA/V
g(k) = 100
Ia (mA)
60
50
40
30
20
10
Va=100-250V
Vg'= 80V
Va=80-100V
Vg'=50 V
Vg (V)
-60
-50
-40
-30
-20
-10
0
10
20

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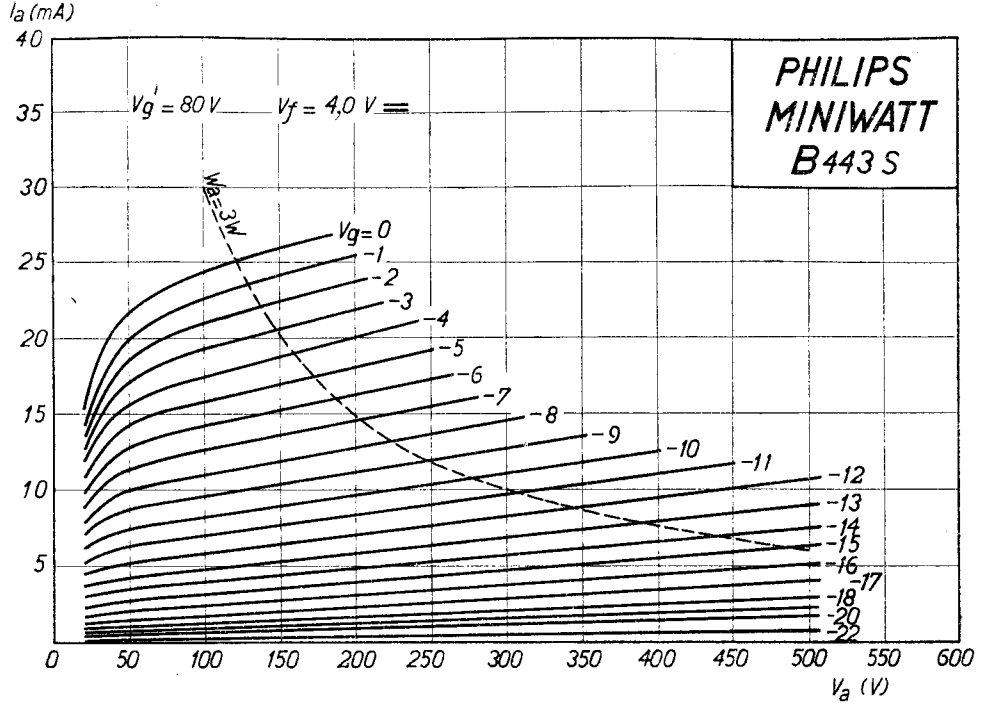
Max. Anodenspannung Tension anodique max. Max. anode voltage	V_{ao} V_{a_L}	= 400 V = 200 V
Max. Anodenbelastung Dissipation anodique max. Max. anode dissipation	W_a	= 3 W
Max. Kathodenstrom Courant cathodique max. Max. cathode current	I_c	= 15 mA
Max. Schirmgitterspannung Tension de grille-écran max. Max. screen-grid voltage	$V_{g'o}$ $V_{g'}$	= 400 V = 80 V
Max. Schirmgitterbelastung Dissipation de grille-écran max. Max. screen-grid dissipation	$W_{g'}$	= 0,4 W
Mittlerer Schirmgitterstrom Courant de grille-écran moyen Average screen-grid current	$I_{g'}$	= 1,9 mA
Ungefähre Grenzw. des Schirmgitterstr. Limites approxim. du cour. de gr.-écran Approx. limits of screen-grid current	$I_{g'}$ min. $I_{g'}$ max.	= 1,4 mA = 2,4 mA
Gitterstrom-Einsatzpunkt Point de commenc. du courant de grille Starting point of grid current	V_{gi} $(V_f = 4\ V\ =)$	= −0,4 V
Max. Widerstand im Gitterkreis Résistance max. dans le circuit de grille Max. resistance in grid circuit	R_{g1} R_{g2}	= 1,5 M.Ohm = 1,0 M.Ohm
Nutzleistung Puissance utile Output	W_{o1} $(V_{g\ eff} = 5{,}1\ V)$ $(R_a = 20000\ \Omega)$ W_{o2} $(V_{g\ eff} = 7{,}0\ V)$ $(R_a = 20000\ \Omega)$	= 0,58 W = 0,86 W
Kapazitäten Capacités Capacities	C_{ag} C_{ak} C_{gk}	= 1,4 $\mu\mu$F = 9,6 $\mu\mu$F = 8,9 $\mu\mu$F


I_a (mA)
40
35
30
25
20
15
10
5
0
50
100
150
200
250
300
350
400
450
500
550
600
V_a (V)
$V_g' = 80\,V$
$V_f = 4{,}0\,V$ ⎓
$W_a = 3\,W$
$V_g = 0$
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
-13
-14
-15
-16
-17
-18
-20
-22
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Max. Anodenspannung Tension anodique max. Max. anode voltage	V_{ao} V_{a_L}	= 400 V = 250 V
Max. Anodenbelastung Dissipation anodique max. Max. anode dissipation	W_a	= 3 W
Max. Kathodenstrom Courant cathodique max. Max. cathode current	I_c	= 15 mA
Max. Schirmgitterspannung Tension de grille-écran max. Max. screen-grid voltage	$V_{g'o}$ $V_{g'}$	= 400 V = 80 V
Max. Schirmgitterbelastung Dissipation de grille-écran max. Max. screen-grid dissipation	$W_{g'}$	= 0,4 W
Mittlerer Schirmgitterstrom Courant de grille-écran moyen Average screen-grid current	$I_{g'}$	= 2 mA
Ungefähre Grenzw. des Schirmgitterstr. Limites approxim. du cour. de gr.-écran Approx. limits of screen-grid current	$I_{g'}$ min. $I_{g'}$ max.	= 1,3 mA = 2,7 mA
Gitterstrom-Einsatzpunkt Point de commenc. du courant de grille Starting point of grid current	V_{gi} V_f = 4 V ∿)	= -2 V
Max. Widerstand im Gitterkreis Résistance max. dans le circuit de grille Max. resistance in grid circuit	R_{g1} R_{g2}	= 1,5 M.Ohm = 1,0 M.Ohm
Nutzleistung Puissance utile Output	W_{o1} (V_{geff} = 6,2 V; R_a = 22000 Ohm) W_{o2} (V_{geff} = 6,8 V; R_a = 22000 Ohm)	= 0,9 W = 1,12 W
Kapazitäten Capacités Capacities	C_{ag} C_{ak} C_{gk}	= 1,4 $\mu\mu$F = 9,6 $\mu\mu$F = 8,9 $\mu\mu$F

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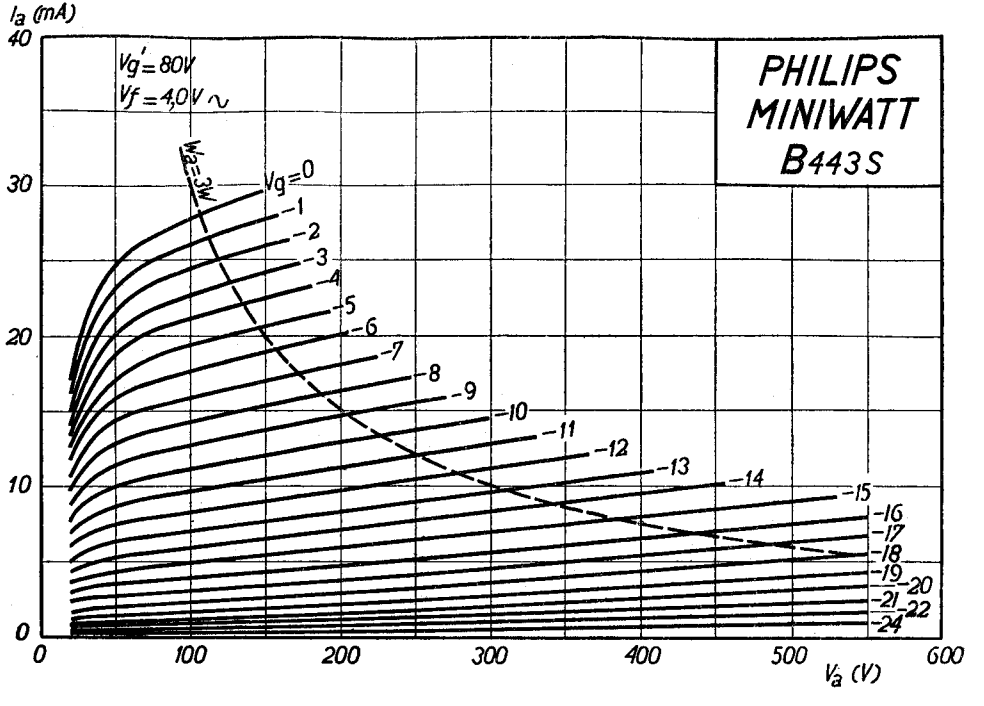
I_a (mA)
40
30
20
10
0
$V_g' = 80V$
$V_f = 4{,}0V \sim$
$W_a = 3W$
$V_g = 0$
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
-11
-12
-13
-14
-15
-16
-17
-18
-19
-20
-21
-22
-24
PHILIPS
MINIWATT
B443S
0
100
200
300
400
500
600
V_a (V)