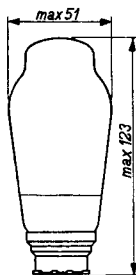
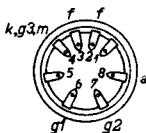
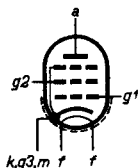


OUTPUT PENTODE
 PENTHODE DE SORTIE
 ENDPENTHODE

Heating : indirect by A.C.;
 parallel supply
 Chauffage : indirect par C.A.; Vf = 6,3 V
 alimentation en parallèle If = 1,0 A
 Heizung : indirekt durch Wechselstrom;
 Parallelspeisung



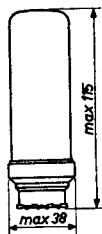
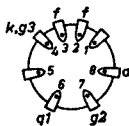
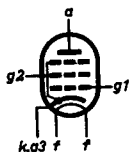
Capacities
 Capacités
 Kapazitäten

Ca = 13,5 pF
 Cg1 = 18,5 pF
 Cagl < 0,7 pF
 Cglf = 1,5 pF
 Ckf = 8,5 pF

OUTPUT PENTODE
PENTHODE DE SORTIE
ENDPENTODE

Heating : indirect; parallel supply $V_f = 6,3 \text{ V}$
 Chauffage: indirect; alimentation- parallèle $I_f = 1,5 \text{ A}$
 Heizung : indirect; Parallelspeisung

Dimensions in mm
 Dimensions en mm
 Abmessungen in mm



Base, culot, Sockel: P

Capacitances	$C_a = 13,5 \text{ pF}$	$C_{ag1} < 0,7 \text{ pF}$
Capacités	$C_{g1} = 18,5 \text{ pF}$	$C_{g1f} = 1,5 \text{ pF}$
Kapazitäten		$C_{kf} = 8,5 \text{ pF}$

Operating characteristics class A
 Caractéristiques d'utilisation classe A
 Betriebsdaten Klasse A

V_a	=	250 V
V_{g2}	=	250 V
R_k	=	90 Ω
I_a	=	72 mA
I_{g2}	=	8 mA
S	=	14,5 mA/V
μ_{g2g1}	=	20 -
R_i	=	20 k Ω
$R_{a\sim}$	=	3,5 k Ω
$V_1(I_{g1}=+0,3\mu\text{A})$	=	5,3 V _{eff}
$W_o(I_{g1}=+0,3\mu\text{A})$	=	8 W
$dt_{tot}(I_{g1}=+0,3\mu\text{A})$	=	10 %
$V_1(W_o = 50 \text{ mW})$	=	0,3 V _{eff}

Operating conditions class A
 Caractéristiques d'utilisation classe A
 Betriebsdaten Klasse A

Va	=	250	V
Vg2	=	250	V
Rk	=	90	Ω
Ia	=	72	mA
Ig2	=	8	mA
S	=	14,5	mA/V
$\mu g2g1$	=	20	-
Ri	=	20	k Ω
Ra	=	3,5	k Ω
Vi (Igl=+0,3 μ A)	=	5,3	V _{eff}
Wo (Igl=+0,3 μ A)	=	8	W
d (Igl=+0,3 μ A)	=	10	%
Vi (Wo = 50 mW)	=	0,3	V _{eff}

Operating conditions class AB
 Caractéristiques d'utilisation classe AB
 Betriebsdaten Klasse AB

Raa'	=	8	6	k Ω
Rg2	=	2,2	0,7	k Ω
Rk	=	170	125	Ω
Vi	=	0 17	0 14	V _{eff}
Vb _a	=	425 425	375 375	V
Va+V _{Rk}	=	405 400	355 350	V
Vb _{g2}	=	425 425	375 375	V
Ia	=	2x46 2x58	2x52 2x64	mA
Ig2	=	2x5 2x14,5	2x6,5 2x16,5	mA
Wo	=	0 29	0 27,5	W
d	=	- 5	- 4	%

Operating characteristics class AB
 Caractéristiques d'utilisation classe AB
 Betriebsdaten Klasse AB

$R_{aa\sim}$	=	8		6		k Ω
R_{g2}	=	2,2		0,7		k Ω
R_k	=	170		125		Ω
V_i	=	0	17	0	14	V_{eff}
V_{ba}	=	425	425	375	375	V
$V_a + V_{Rk}$	=	405	400	355	350	V
V_{bg2}	=	425	425	375	375	V
I_a	=	2x46	2x58	2x52	2x64	mA
I_{g2}	=	2x5	2x14,5	2x6,5	2x16,5	mA
W_o	=	0	29	0	27,5	W
dt_{tot}	=	-	5	-	4	%

Operating characteristics class AB in triode connection (g_2 connected to anode)

Caractéristiques d'utilisation classe AB en connexion triode (g_2 reliée à l'anode)

Betriebsdaten Klasse AB in Triodenschaltung (g_2 verbunden mit Anode)

V_b	=	400		V
R_k	=	175		Ω
$R_{aa\sim}$	=	5,5		k Ω
V_i	=	0	13,5	V_{eff}
I_a	=	2x48	2x54	mA
W_o	=	0	13	W
dt_{tot}	=	-	1,5	%

Limiting values

Caractéristiques limites

Grenzdaten

V_{a0}	= max. 800 V	$W_{g2}(V_1=0)$	= max. 2 W
V_a	= max. 425 V	$W_{g2}(W_o=\max.)$	= max. 5 W
W_a	= max. 18 W	$V_{g1}(I_{g1}=+0,3\mu A)$	= max. -1,3 V
V_{g20}	= max. 650 V	$R_{g1}(A, AB)$	= max. 0,7 M Ω
V_{g2}	= max. 425 V	$R_{g1}(B)$	= max. 0,5 M Ω
I_k	= max. 90 mA	V_{kf}	= max. 50 V
		R_{kf}	= max. 20 k Ω

Operating conditions class A in triode connection
(g2 connected to anode)

Caractéristiques d'utilisation classe A en
connexion triode (g2 reliée à l'anode)

Betriebsdaten Klasse A in Triodenschaltung
(g2 verbunden mit Anode)

Vb =	375	V
Rk =	300	Ω
Ra =	4	k Ω
Ia =	50	mA
Vi =	11	V _{eff}
Wo =	4,5	W
d =	9	%

Operating conditions class AB in triode connection
(g2 connected to anode)

Caractéristiques d'utilisation classe AB en
connexion triode (g2 reliée à l'anode)

Betriebsdaten Klasse AB in Triodenschaltung
(g2 verbunden mit Anode)

Vb =	400	V
Rk =	175	Ω
Raa' =	5,5	k Ω
Vi =	<div style="display: flex; justify-content: space-between; width: 100%;"> 0 13,5 </div>	V _{eff}
Ia =	<div style="display: flex; justify-content: space-between; width: 100%;"> 2x48 2x54 </div>	mA
Wo =	<div style="display: flex; justify-content: space-between; width: 100%;"> 0 13 </div>	W
d =	<div style="display: flex; justify-content: space-between; width: 100%;"> - 1,5 </div>	%

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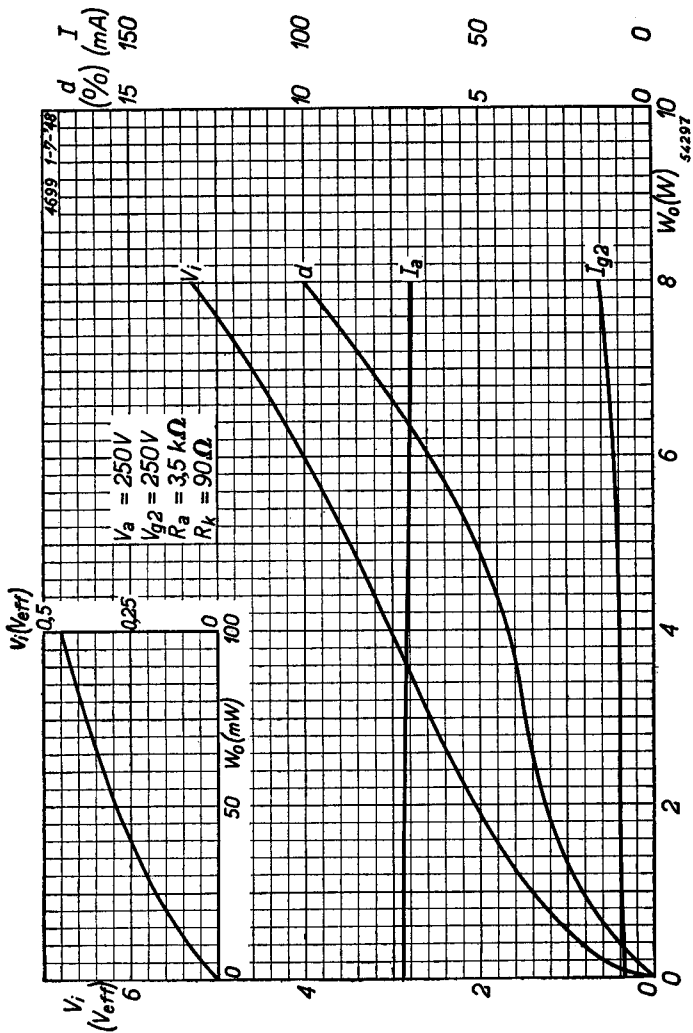
"Miniwatt"

Limiting values
Caractéristiques limites
Grenzdaten

V_{a_0}	= max.	800 V
V_a	= max.	425 V
W_a	= max.	18 W
V_{g2_0}	= max.	650 V
V_{g2}	= max.	425 V
$W_{g2} (V_i = 0)$	= max.	2 W
$W_{g2} (W_o = \text{max.})$	= max.	5 W
I_k	= max.	90 mA
$V_{g1} (I_{g1} = +0,3\mu A)$	= max.	-1,3 V
$R_{g1} (A, AB)$	= max.	0,7 M Ω
$R_{g1} (B)$	= max.	0,5 M Ω
V_{fk}	= max.	50 V
R_{fk}	= max.	20 k Ω

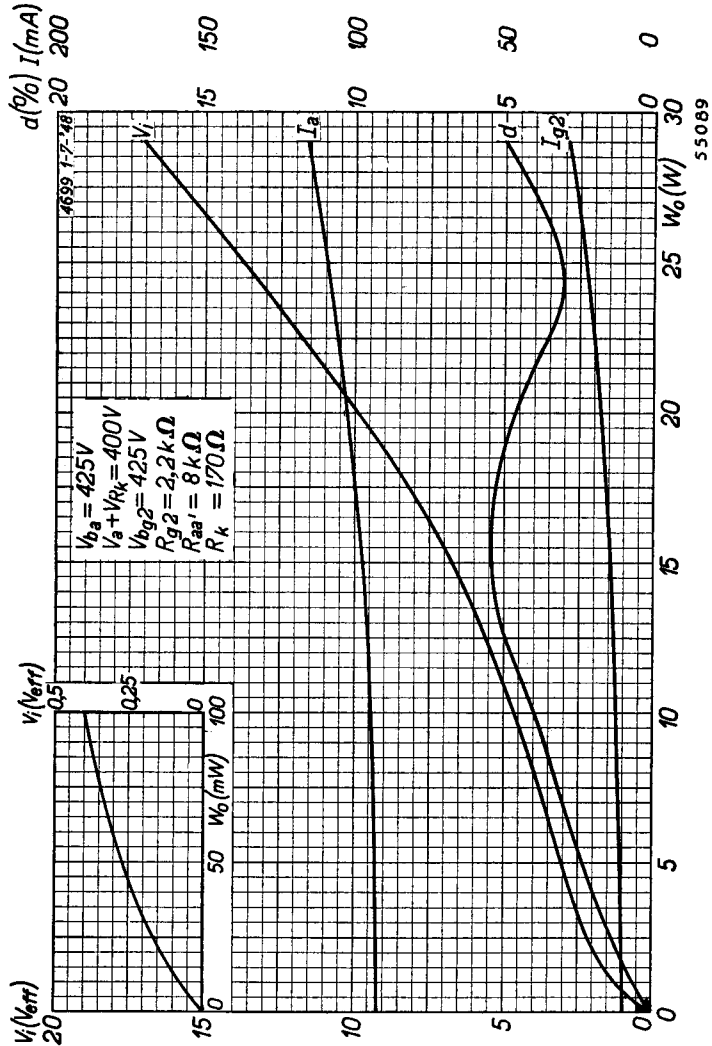
Miniwatt

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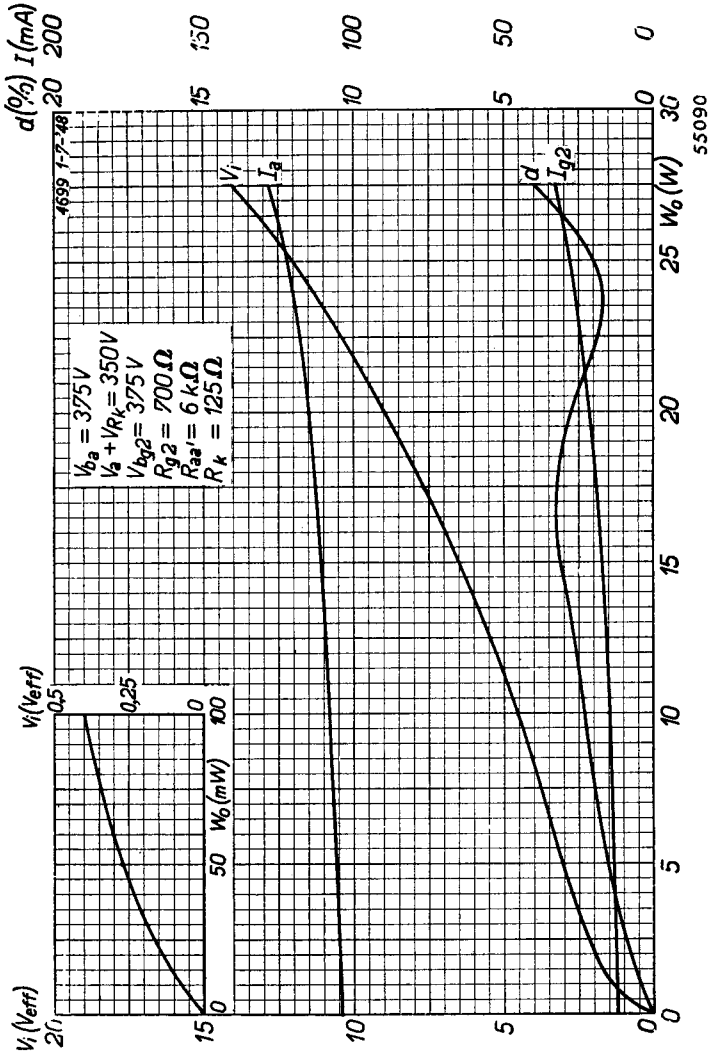


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"Miniwatt"

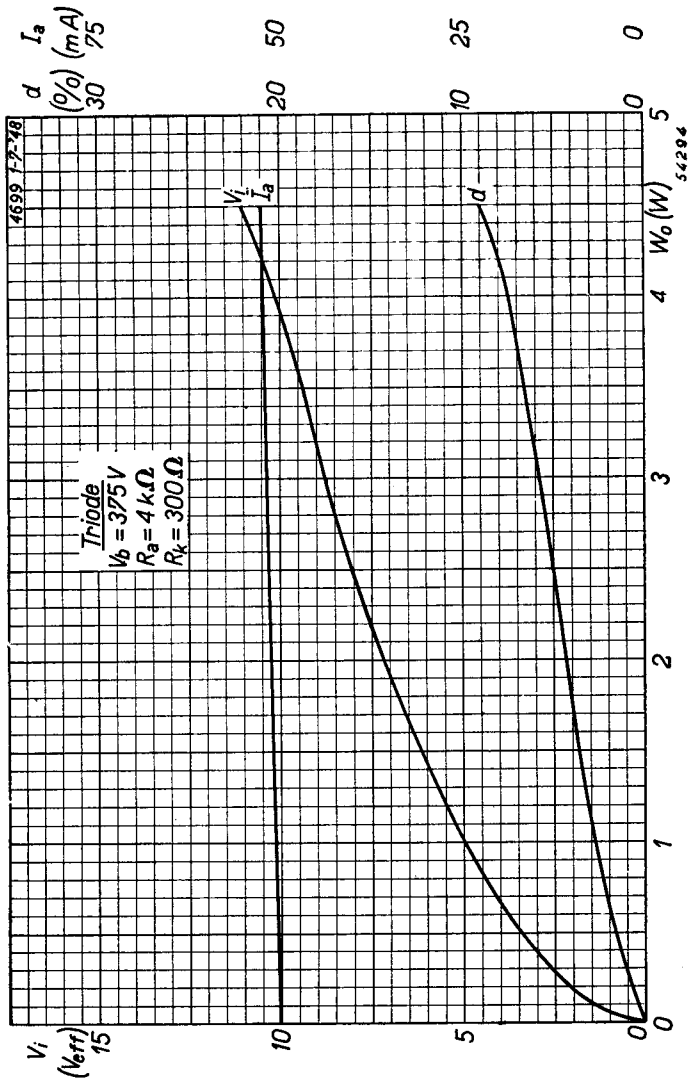


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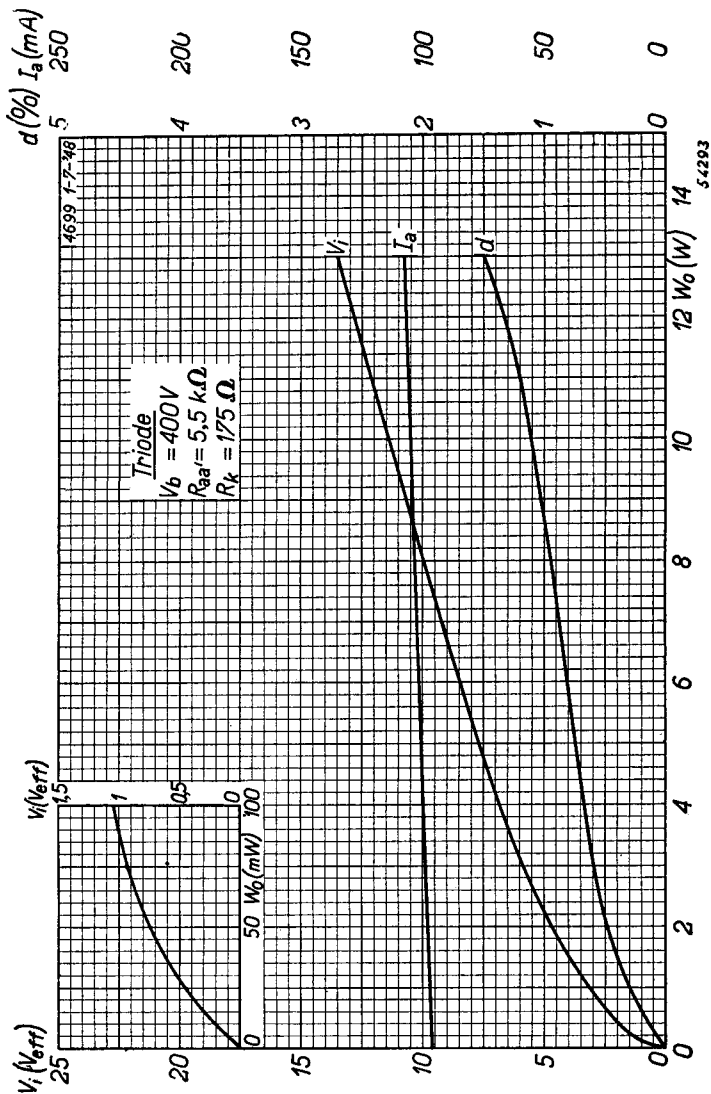
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"Miniwatt"



24.8.1948

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Tube*

HANDBOOK

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12	FP	1999.02.25