

"Kiniwatt"

UCH 41

Preliminary data

TRIODE-HEXODE frequency converter

HEATER A.C./D.C. series supply

$V_f = 14 \text{ V}$
 $I_f = 0,100 \text{ A}$

CAPACITIES

Hexode section

$C_{g1} = 3,8 \text{ pF}$
 $C_a = 4,7 \text{ pF}$
 $C_{ag1} = 0,1 \text{ pF}$
 $C_{glf} = 0,15 \text{ pF}$

Triode section

$C_{gk} = 4,9 \text{ pF}$
 $C_{ak} = 1,5 \text{ pF}$
 $C_{ag} = 1,2 \text{ pF}$

Between hexode- and triode section

$C(gT+g3)-g1H < 0,35 \text{ pF}$
 $C(gT+g3)-aH < 0,2 \text{ pF}$

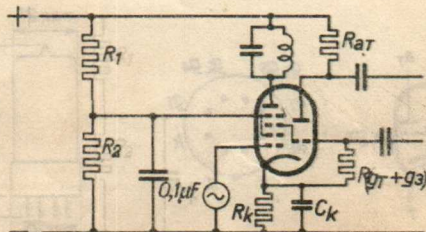
OPERATING CONDITIONS for the hexode section (screen-grid supply via potentiometer)

$V_{aH}=V_b$	=	100	170	200	V
R_1	=	29	29	29	k Ω
R_2	=	100	100	100	k Ω
R_k	=	200	200	225	Ω
$R(gT+g3)$	=	20	20	20	k Ω
$I(gT+g3)$	=	200	320	360	μA
V_{g1}	=	-1 -16	-1,8 -25	-2,2 -30	V
$V(g2+g4)$	=	53 78	87 132	105 155	V
I_{aH}	=	1,0 -	2,2 -	3 -	mA
$I(g2+g4)$	=	1,1 -	2,0 -	2,2 -	mA
S_c	=	320 3,2	450 4,5	500 5	$\mu\text{A/V}$
R_i	=	0,75 >5	1 >5	1,2 >5	M Ω
R_{eq}	=	115 -	145 -	220 -	k Ω

OPERATING CONDITIONS for the triode section

V_b	=	100	170	200	V
R_a	=	10	10	20	k Ω
I_a	=	2,8	4,9	4,6	mA
$R(gT+g3)$	=	20	20	20	k Ω
$I(gT+g3)$	=	200	320	360	μA
V_{osc}	=	4	7	8	Veff
S_{eff}	=	0,56	0,6	0,5	mA/V

CIRCUIT DIAGRAM



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CHARACTERISTICS of the Triode section

V_a	=	100	V
V_{g1}	=	0	V
I_a	=	8,5	mA
S	=	1,9	mA/V
μ	=	19	

LIMITS of the hexode section

V_{a0}	=	max.	550	V
V_a	=	max.	250	V
V_a	=	max.	0,8	W
$V(g2+g4)_0$	=	max.	550	V
$V(g2+g4)$	=	max.	125	V
$W(g2+g4)$	=	max.	0,3	W
$V_{g1}(I_{g1} = + 0,3 \mu A)$	=	max.	-1,3	V
I_k	=	max.	7	mA
R_{g1k}	=	max.	3	M Ω
R_{g3k}	=	max.	3	M Ω
R_{fk}	=	max.	20	k Ω
V_{fk}	=	max.	150	V

LIMITS of the triode section

V_{a0}	=	max.	550	V
V_a	=	max.	175	V
V_a	=	max.	0,9	W
$V_{g1}(I_{g1} = + 0,3 \mu A)$	=	max.	-1,3	V
I_k	=	max.	5,5	mA
R_{gk}	=	max.	3	M Ω
R_{fk}	=	max.	20	k Ω
V_{fk}	=	max.	150	V

Electrode arrangement, electrode connections and max. dimensions in mm.

