

"Miniwatt" UCH 41

Preliminary data

TRIODE-HEXODE frequency converter

HEATER A.C./D.C. series supply $V_f = 14$ V
 $I_f = 0,100$ A

CAPACITIES

Hexode section

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

Triode section

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

Between hexode- and triode section

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

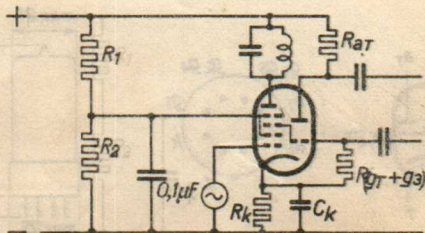
OPERATING CONDITIONS for the hexode section (screen-grid supply via potentiometer)

$V_{aH}=V_b$	=	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	-2,2	-30	V
$V(g2+g4)$	=	53	78	105	155	V
I_{aH}	=	1,0	-	3	-	mA
$I(g2+g4)$	=	1,1	-	2,2	-	mA
S_c	=	320	3,2	450	4,5	5 μA/V
R_i	=	0,75	> 5	1	> 5	M.Ω
R_{eq}	=	115	-	145	-	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	V _{eff}
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
I_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
I_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.

