Preliminary data

DIODE-PENTODE with variable-mu

for H.F., I.F. or L.F. amplifier and detector or A.V.C.

HEATER	A.C./D.C.series supply	Vf	= 12,6 V
		If	= 0,100 A
CAPACITIES	pentode section	Cagl	< 0,002 pF
		Ca	= 7,0 pF
		Cgl	= 4,0 pF
		Cglf	< 0,05 pF
	diode section	Cdk	= 3,8 pF
		Cdf	< 0,02 pF
	between pentode- and diode section	Cdgl	<0,0015 pF
		Cda	< 0,15 pF

OPERATING CONDITIONS of the pentode section as H.F.- or I.F. amplifier.

Va = Vb	=	100		170		200		V
Rg2	=	44		44		44		kΩ
Rk	=	300		300		300		Ω
Vgl	=	-1,1	-17	-2	-30	-2,4	-35	V
Ia	=	2,8	-	5	-	6	-	mA
Ig2	=	0,9	-	1,6	-	1,9	-	mA
S	=	1650	16,5	1800	18	1900	19	µA/V
Ri	=	1	> 10	1,2	>10	1,3	>10	MΩ
µg2gl	=	17	-	17	-	17	-	
Req	=	7	-	9	-	9,6	-	kΩ

OPERATING CONDITIONS of the pentode section as L.F. - amplifier

Vb (V)	Ra (MΩ)	Rg2 (MΩ)	Rk (kΩ)	Ia (mA)	Ig2 (mA)	Vo (V_{eff})	d (%)	Vo/Vi
170	0,2	0,73	2,7	0,58	0,19	6,2	1,8	78
100	0,2	0,73	2,7	0,34	0,10	4,0	1,3	73

UAF 41 „Miniwatt"

LIMITS of the pentode section

Vao	=	max.	550	V
Va	=	max.	250	V
Wa	=	max.	2	W
Vg2o	=	max.	550	V
Vg2 (Ia < 3 mA)	=	max.	250	V
Vg2 (Ia = 6 mA)	=	max.	150	V
Wg2	=	max.	0,3	W
Ik	=	max.	10	mA
Vg1 (Ig1 = +0,3 µA)	=	max.	-1,3	V
Rg1k	=	max.	3	MΩ
Rfk	=	max.	20	kΩ
Vfk	=	max.	150	V

LIMITS of the diode section

Vd (peak value)	=	max.	200	V
Id	=	max.	0,8	mA
Vd (Id = + 0,3 µA)	=	max.	-1,3	V
Rfk	=	max.	20	kΩ
Vfk	=	max.	150	V

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