

4 VALVE DATA PREFERRED TYPES

A VOLTAGE AMPLIFYING PENTODES

UAF 42

(contd.)

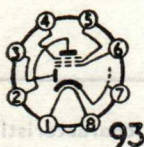
LIMITING VALUES

Pentode Section

$V_{a(b)}$ max.	550	V
V_a max.	250	V
p_a max.	2	W
$V_{g2(b)}$ max.	550	V
V_{g2} max. ($I_a < 2.5$ mA)	250	V
V_{g2} max. ($I_a = 5.0$ mA)	150	V
p_{g2} max.	0.3	W
I_k max.	10	mA
* R_{g2-k} max.	3.0	M Ω
R_{g1-k} max.	3.0	M Ω
V_{h-k} max.	150	V
*For $V_{g2(pk)}$ not exceeding +10 V		

Diode Section

V_{ad} (pk) max.	200	V
I_{ad} max.	0.8	mA
V_{ad} max. ($I_{ad} = +0.3$ μ A)	-1.3	V
V_{h-k} max.	150	V



BASE:
BBA

DIMENSIONS:

L=60 mm
D=22 mm

UBF 80

Preliminary
Data

Double diode variable- μ H.F. or A.F. pentode

HEATER

V_h 17V I_h 0.1 A Suitable for series operation, A.C. or D.C.

CAPACITANCES

$C_{a'd-g1}$	<0.0008	μ F
$C_{a''d-g1}$	<0.001	μ F
$C_{a'd-a}$	<0.2	μ F
$C_{a''d-a}$	<0.05	μ F
Pentode Section	<0.0025	μ F
C_{a-g1}	4.6	μ F
C_{out}	4.0	μ F
C_{in}	<0.07	μ F
C_{g1-h}	2.15	μ F
Diode Sections	2.35	μ F
$C_{a'd-k}$	<0.3	μ F
$C_{a''d-k}$		
$C_{a'd-a''d}$		

OPERATING CONDITIONS as H.F. Amplifier

$V_a = V_b$	100	170	200	V
R_{g2}	47	47	68	K Ω
V_{g2}	0	0	0	V
I_a	2.8	5.0	5.0	mA
I_{g2}	1.0	1.75	1.75	mA
V_{g1}	-1.2	-2.0	-2.0	V
R_k	300	300	300	Ω
g_m	1.9	2.2	2.2	mA/V
r_a	0.9	0.9	1.0	M Ω
μ_{g1-g2}	18	18	18	
R_{eq}	4.6	6.2	6.2	K Ω
V_{g1} (for 100 : 1 reduction in g_m)	-15.5	-26.5	-31.5	V



VOLTAGE AMPLIFYING PENTODES A

OPERATING CONDITIONS

As R.C. coupled A.F. amplifier

	100	100	170	170	V
V_b					
R_a	0.22	0.1	0.22	0.1	M Ω
I_a	0.32	0.73	0.56	1.25	mA
R_{g1}	0.68	0.27	0.68	0.27	M Ω
I_{g1}	0.12	0.29	0.2	0.5	mA
R_k	2.7	1.0	2.7	1.0	K Ω
R_{g2}	1.0	1.0	1.0	1.0	M Ω
V_{out}/V_{in}	82	67	85	70	
** D_{tot}	1.9	1.8	1.5	1.6	%
* R_{g1}	0.68	0.33	0.68	0.33	M Ω

*Grid resistor of following valve. ** $V_{out}=5 V_{r.m.s.}$

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(contd.)

LIMITING VALUES

Pentode Section

$V_{a(b)}$ max.	550	V
V_a max.	250	V
p_a max.	1.5	W
$V_{g2(b)}$ max.	550	V
V_{g2} max. ($I_a < 2$ mA)	250	V
V_{g2} max. ($I_a = 5$ mA)	125	V
p_{g2} max.	0.3	W
I_k max.	10	mA
R_{g1-k} max.	3	M Ω
V_{h-k} max.	150	V
$V_{ad(pk)}$ max.	200	V
I_{ad} max.	0.8	mA

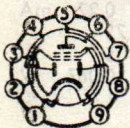
Diode Section

BASE:

B9A
(Noval)

DIMENSIONS:

L=67 mm
D=22.2 mm



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H.F. pentode with variable-mu characteristics

UF 41

HEATER

V_h 12.6 V I_h 0.1 A Suitable for series operation, A.C. or D.C.

CAPACITANCES

C_{a-g1}	<0.002	$\mu\mu\text{F}$
C_{out}	8.0	$\mu\mu\text{F}$
C_{in}	4.7	$\mu\mu\text{F}$

OPERATING CONDITIONS

As R.F. amplifier

	100		170	V
$V_a=V_b$	39		39	K Ω
R_{g1}	330		330	Ω
V_{g1}	-1.4	-17	-2.5	-28 V
I_a	3.3	—	6.0	— mA
I_{g1}	1.0	—	1.75	— mA
g_m	1,800	18	2,100	21 $\mu\text{A/V}$
r_a	0.8	>10	1	>10 M Ω
μ_{g1-g2}	18	—	18	—
R_{eq}	6.0	—	8.0	— K Ω

