

4 VALVE DATA PREFERRED TYPES

A VOLTAGE AMPLIFYING PENTODES

DAF 91

(contd.)

OPERATING CONDITIONS (contd.)

As R.C. coupled A.F. amplifier ($V_{g1}=0$)

V_b	90	90	90	90	90	90	90	90	90	V
R_a	0.27	0.27	0.27	0.47	0.47	0.47	1.0	1.0	1.0	M Ω
I_a	220	220	220	130	130	130	65	65	65	μ A
R_{g2}	1.0	1.0	1.0	1.8	1.8	1.8	3.9	3.9	3.9	M Ω
I_{g2}	61	61	61	36	36	36	18.7	18.7	18.7	μ A
R_{g1}^*	0.47	1.0	4.7	1.0	4.7	10	2.2	4.7	10	M Ω
$V_{out(r.m.s.)}$	4.9	6.0	6.9	6.65	8.35	8.7	9.0	10.4	11.0	V
V_{out}/V_{in}	49	60	69	66.5	83.5	87	90	104	110	
D_{tot}	0.8	1.4	2.0	1.7	3.1	3.5	3.0	3.3	3.6	%
$V_{out(r.m.s.)}$ ($D_{tot}=5\%$)	14.4	17.5	20	16.5	20.3	21.0	15.1	17.4	17.6	V
V_{out}/V_{in} ($D_{tot}=5\%$)	42.4	51.5	58.9	59	72.5	75	84	96.8	103.5	

*Grid resistance of following valve

LIMITING VALUES

V_a max.	90	V
V_{g2} max.	90	V
V_{g1} max.	0	V
I_k max.	4.5	mA
I_{ad} max.	0.25	mA



BASE :

B7G

DIMENSIONS :

L=54 mm

D=19mm

40

DF 33

H.F. pentode with variable-mu characteristics

FILAMENT

V_f 1.4 V I_f 0.05 A Suitable for D.C. operation only

CAPACITANCES

C_{a-g1}	<0.007	μ F
C_{in}	3.8	μ F
C_{out}	9.5	μ F

OPERATING CONDITIONS

V_a	90	V
V_{g2}	90	V
V_{g1}	0	V
I_a	1.2	mA
I_{g2}	0.3	mA
g_m	750	μ A/V
r_a	1.5	M Ω
V_{g1} ($g_m=5\mu$ A/V)	-4.0	V

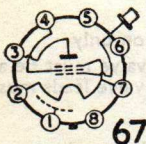


VALVE DATA PREFERRED TYPES 4 VOLTAGE AMPLIFYING PENTODES A

LIMITING VALUES

V_a max.	110	V
V_{g2} max.	110	V

DF 33
(contd.)



BASE :
Octal

DIMENSIONS :
L=102 mm
D=30 mm

Subminiature A.F. voltage amplifying pentode for use in hearing aids.

DF 66

FILAMENT

V_f 0.625 V I_f 15mA Suitable for D.C. operation only

MOUNTING POSITION Any

Direct soldered connections to the leads must be at least 5 mm from the seal and any bending of the leads at least 1.5 mm from the seal

CAPACITANCES (measured without external screen)

C_{a-g1}	<0.15	$\mu\mu\text{F}$
C_{in}	1.6	$\mu\mu\text{F}$
C_{out}	2.2	$\mu\mu\text{F}$

CHARACTERISTICS

V_a	22.5	V
V_{g2}	22.5	V
I_a	50	μA
I_{g2}	15	μA
V_{g1}	-1.05	V
g_m	100	$\mu\text{A/V}$
r_a	>2	$\text{M}\Omega$
μ_{g1-g2}	11.5	

OPERATING CONDITIONS As R.C. coupled A.F. amplifier

	With fixed bias	With grid current bias	
V_b	22.5	22.5	V
R_a	1.0	1.0	$\text{M}\Omega$
R_{g2}	2.0	2.7	$\text{M}\Omega$
V_{g1}	-0.625	—	V
R_{g1}	—	10	$\text{M}\Omega$
I_k	16	16	μA
V_{out}/V_{in}	33	35	
* R_{g1}	5	5	$\text{M}\Omega$

* Grid resistance of following valve

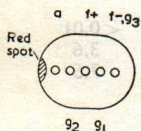
LIMITING VALUES

V_a max.	45	V
V_{g2} max.	45	V
I_k max.	100	μA

BASE
B5A

DIMENSIONS

L=28 mm (plus 32 mm leads)
D=6.1 mm $\times$ 8.4 mm



121

