

4 VALVE DATA PREFERRED TYPES

A VOLTAGE AMPLIFYING PENTODES

DF 70

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

FILAMENT

V_f 0.625 V I_f 25 mA Suitable for D.C. operation only

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

CAPACITANCES (Measured without external screen)

C_{a-g1}	<0.5	$\mu\mu\text{F}$
C_{in}	1.6	$\mu\mu\text{F}$
C_{out}	2.4	$\mu\mu\text{F}$

CHARACTERISTICS

V_a	30	V
V_{g2}	30	V
V_{g1}	0	V
I_a	0.375	μA
I_{g2}	0.125	μA
g_m	0.22	mA/V
r_a	0.5	$\text{M}\Omega$

OPERATING CONDITIONS AS RC COUPLED A.F. AMPLIFIER

V_b	30	30	30	45	V
V_{g1}	-0.625	-0.625	-0.625	-0.625	V
R_{g2}	1.5	3.3	1.5	3.3	$\text{M}\Omega$
I_k	48	24	81	40	μA
R_a	0.47	1.0	0.47	1.0	$\text{M}\Omega$
V_{out}/V_{in}	37	44	43	57	
$*R_{g1}$	3.3	3.3	3.3	3.3	$\text{M}\Omega$

*Grid resistance of following valve

LIMITING VALUES



16

V_a max.	45	V
V_{g2} max.	45	V
I_k max.	500	μA

BASE :

B8D

DIMENSIONS :

L = 29.5 mm plus 32 mm leads
D = 10.1 mm

DF 91

Miniature 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}	<0.01	$\mu\mu\text{F}$
C_{in}	3.6	$\mu\mu\text{F}$
C_{out}	7.5	$\mu\mu\text{F}$

VALVE DATA PREFERRED TYPES **4**

VOLTAGE AMPLIFYING PENTODES **A**

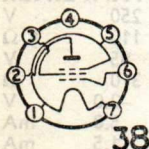
OPERATING CONDITIONS

V_a	45	67.5	90	90	V
V_{g2}	45	67.5	45	67.5	V
V_{g1}	0	0	0	0	V
I_a	1.7	3.4	1.8	3.5	mA
I_{g2}	0.7	1.5	0.65	1.4	mA
g_m	700	875	750	900	$\mu A/V$
$V_{g1} (g_m = 10 \mu A/V)$	-10	-16	-10	-16	V
r_a	0.35	0.25	0.8	0.5	M Ω
R_{g2}	—	—	68	15	K Ω

DF 91
(contd.)

LIMITING VALUES

V_a max.	90	V
$V_{g2(b)}$ max.	90	V
V_{g2} max.	67.5	V
V_{g1} max.	0	V
I_k max.	5.5	mA



BASE
B7G

DIMENSIONS
L=54 mm
D=19 mm

Miniature H.F. pentode with sharp cut-off characteristics

DF 92

FILAMENT

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

MOUNTING POSITION Any

CAPACITANCES (Measured without external screening)

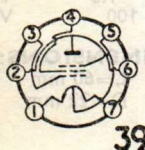
C_{a-g1}	<0.01	$\mu\mu F$
C_{in}	3.6	$\mu\mu F$
C_{out}	7.5	$\mu\mu F$

CHARACTERISTICS

V_a	90	90	V
V_{g2}	45	67.5	V
V_{g1}	0	0	V
I_a	1.9	3.7	mA
I_{g2}	0.7	1.4	mA
g_m	0.85	1.0	mA/V
r_a	0.9	0.5	M Ω
μ_{g1-g2}	11	11	

LIMITING VALUES

V_a max.	90	V
$V_{g2(b)}$ max.	90	V
V_{g2} max.	70	V
V_{g1} max.	0	V
I_k max.	6.0	mA



BASE
B7G

DIMENSIONS
L=54 mm
D=19 mm

