

EL 41

Output pentode.

HEATER

V_h 6.3 V I_h 0.7 A Suitable for A.C. mains operation

CAPACITANCES

C_{in}	10.2	$\mu\mu F$
C_{out}	7.8	$\mu\mu F$
C_{a-g1}	< 1.0	$\mu\mu F$

OPERATING CONDITIONS

As single Class "A" amplifier

V_a	250	V
V_{g2}	250	V
R_k	180	Ω
V_{g1}	-7	V
I_a	36	mA
I_{g2}	5.2	mA
g_m	10	mA/V
r_a	40	K Ω
μ_{g1-g2}	22	
R_a	7	K Ω
$V_{in(r, m, s.)}$ ($P_{out}=50$ mW)	0.32	V
P_{out} ($D_{tot}=10\%$)	4.2	W
$V_{in(r, m, s.)}$ ($D_{tot}=10\%$)	3.7	V
P_{out} ($\eta=50\%$)	4.5	W
$V_{in(r, m, s.)}$ ($P_{out}=4.5$ W)	4.0	V
D_{tot} ($P_{out}=4.5$ W)	11.5	%

LIMITING VALUES

$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	9	W
$V_{g2(b)}$ max.	550	V
V_{g2} max.	300	V
p_{g2} (zero sig.) max.	1.4	W
p_{g2} (max. sig.) max.	3.3	W
I_k max.	55	mA
R_{g1-k} max.	1	M Ω
V_{h-k} max.	50	V

BASE :

B8A

DIMENSIONS :

L=80 mm

D=22 mm



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Output pentode, particularly suitable for use in car radio receivers

EL 42

HEATER

V_h 6.3 V I_h 0.2 A Suitable for D.C./A.C. operation

CAPACITANCE

C_{a-g1}	< 0.2	$\mu\mu F$
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4 VALVE DATA PREFERRED TYPES E OUTPUT PENTODES

EL 42 (contd.)

OPERATING CONDITIONS

As single Class "A" amplifier

V_a	200	225	V
V_{g2}	200	225	V
R_k	360	360	Ω
I_a	22.5	26	mA
I_{g2}	3.5	4.1	mA
g_m	3.2	3.2	mA/V
r_a	90	90	K Ω
μ_{g1-g2}	11	11	
R_a	9	9	K Ω
$V_{in(rms)} (P_{out}=50mW)$	0.8	0.75	V
$V_{in(rms)}$	6.5	7.2	V
P_{out}	1.9	2.5	W
D_{tot}	10	10	%

As Class "AB" push-pull pair (self bias)

V_a	200	250	V
V_{g2}	200	250	V
R_k	310	310	Ω
$I_{a(o)}$	2×16	2×20	mA
I_a (max. sig.)	2×17	2×21.5	mA
$I_{g2(o)}$	2×2.6	2×3.2	mA
I_{g2} (max. sig.)	2×5.6	2×6.7	mA
R_{a-a}	15	15	K Ω
$V_{in(rms)} (P_{out}=50mW)$	2×0.75	2×0.7	V
$V_{in(rms)}$	2×9.6	2×12.5	V
P_{out}	4.1	7.0	W
D_{tot}	5.5	5.5	%

As Class "B" push-pull pair (fixed bias)

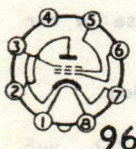
V_a	200	250	V
V_{g2}	200	250	V
V_{g1}	-17	-22.5	V
$I_{a(o)}$	2×5	2×5	mA
I_a (max. sig.)	2×16	2×20	mA
$I_{g2(o)}$	2×0.8	2×0.8	mA
I_{g2} (max. sig.)	2×4.6	2×6.5	mA
R_{a-a}	16	16	K Ω
$V_{in(rms)} (P_{out}=50mW)$	2×1.5	2×1.7	V
$V_{in(rms)}$	2×12	2×16	V
P_{out}	4.0	6.5	W
D_{tot}	3.5	5	%

LIMITING VALUES

$V_{a(b)}$	550	V
V_a max.	300	V
p_a max.	6	W
$V_{g2(b)}$ max.	550	V
V_{g2} max.	300	V
$p_{g2(o)}$ max.	1.0	W
p_{g2} max. (max. sig.)	2.0	W
I_k max.	35	mA
R_{g1-k} max.	2.0	M Ω
V_{h-k} max.	50	V

BASE :
B8A

DIMENSIONS :
L=60 mm
D=22 mm



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