

4 VALVE DATA PREFERRED TYPES

D VOLTAGE AMPLIFYING TRIODES

ECC 35 OPERATING CONDITIONS

(contd.)

As R.C. coupled A.F. amplifier

V_b (V)	R_a (K Ω)	I_a (mA)	R_k (K Ω)	V_{out} $\frac{V_{out}}{V_{in}}$	V_{out}^* (V)	$V_{out}^\dagger$ (V)	D_{tot} (%)	R_{g1}^{**} (K Ω)
400	100	1.3	2.7	40.5	37.5	66.2	10	330
350	100	1.1	2.7	40.5	32.2	57	10	330
300	100	1.0	2.7	40	28	48.7	10	330
250	100	0.8	2.7	40	23.2	41.1	10	330
200	100	0.65	2.7	39.5	18.7	28.5	8	330
400	220	0.73	4.7	46	44	80	10	680
350	220	0.63	4.7	45.5	38	69.3	10	680
300	220	0.53	4.7	45.5	32.5	59	10	680
250	220	0.45	4.7	45	27	43	8.5	680
200	220	0.38	4.7	45	21.5	33.6	8.2	680

*At $D_{tot}=5\%$

†At $D_{tot}=10\%$ or start of I_g

**Grid resistance of following valve

LIMITING VALUES

Each section

$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	1.5	W
I_k max.	8.0	mA
R_{g-k} max.	1.5	M Ω
V_{h-k} max.	90	V



64

BASE :
Octal

DIMENSIONS :
L=83 mm
D=33 mm

ECC 40 Low microphony double triode with separate cathodes

HEATER

V_h 6.3 V I_h 0.6 A Suitable for A.C. mains operation

CAPACITANCES

$C_{g'-h}$	<0.1	$\mu\mu\text{F}$	$C_{g''-h}$	<0.1	$\mu\mu\text{F}$
$C_{a'-g'}$	2.7	$\mu\mu\text{F}$	$C_{a''-g''}$	2.6	$\mu\mu\text{F}$
$C_{g'-k}$	2.6	$\mu\mu\text{F}$	$C_{g''-k''}$	3.0	$\mu\mu\text{F}$
$C_{a'-g''}$	<0.1	$\mu\mu\text{F}$	$C_{a''-g'}$	<0.1	$\mu\mu\text{F}$

CHARACTERISTICS

Each section

V_a	250	V
V_{g1}	-5.2	V
I_a	6	mA
g_m	2.7	mA/V
r_a	11	K Ω
μ	30	



VOLTAGE AMPLIFYING TRIODES D

OPERATING CONDITIONS

As R.C. coupled A.F. amplifier

ECC 40
(contd.)

V_b (V)	I_a (mA)	R_k (Ω)	V_{out} V_{in}	V_{out}^* (V_{rms})	D_{tot} (%)	$R_{g\uparrow}$ (K Ω)	
400	7	4.1	1,200	21	72.5	4.4	150
350	7	3.6	1,200	20.5	60	4.1	150
300	7	3.1	1,200	20	50	4.0	150
250	47	2.6	1,200	20	40	3.8	150
200	47	2.0	1,200	20	29.5	3.4	150
400	100	2.2	2,200	24.5	76	3.9	330
350	100	1.9	2,200	24	65	3.9	330
300	100	1.6	2,200	24	54	3.8	330
250	100	1.4	2,200	24	44	3.7	330
200	100	1.1	2,200	24	33	3.6	330
400	220	1.1	3,900	25	72	3.8	680
350	220	1.0	3,900	25	63	3.7	680
300	220	0.87	3,900	25	53	3.7	680
250	220	0.72	3,900	25	44	3.6	680
200	220	0.58	3,900	24.5	32	3.5	680

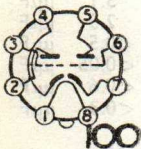
*Output voltage at start of I_g , at lower output voltages the distortion is reduced in proportion.

†Grid resistance of the following valve.

LIMITING VALUES

Each section

$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	1.5	W
I_k max.	10	mA
R_{g-k} max.	1	M Ω
V_{h-k} max.	175	V



BASE :
B8A

DIMENSIONS :
L=67 mm
D=22 mm

Miniature double triode

ECC 91

HEATER

V_h 6.3 V I_h 0.45 A Suitable for A.C. mains operation

For use in
transmitters
see Section H,
page 130

CAPACITANCES

Each section

C_{a-g}	1.6	$\mu\mu F$
C_{g-k}	2.2	$\mu\mu F$
C_{a-k}	0.4	$\mu\mu F$

