

LIMITING VALUES

Hexode Section

$V_{a(b)}$ max.	550	V
V_a max.	300	V
p_a max.	1.2	W
$V_{g2+g4(b)}$ max.	550	V
V_{g2+g4} ($I_a = 4.5$ mA)	125	V
V_{g2+g4} ($I_a < 0.5$ mA)	200	V
p_{g2+g4} max.	0.6	W
I_k max.	15	mA
R_{g1-k} max.	3	M Ω
V_{h-k} max.	100	V

Triode Section

$V_{a(b)}$ max.	550	V
V_a max.	100	V
p_a max.	1.5	W
V_{gt} max. ($I_{gt} = +0.3$ μ A)	-1.3	V
R_{gt-k} max.	100	K Ω

ECH 35
(contd.)



BASE :
Octal

DIMENSIONS :
L=113 mm
D=36 mm

Triode hexode with variable-mu characteristics HEATER

V_h 6.3 V I_h 0.23 A Suitable for A.C. operation

CAPACITANCES

Hexode Section

$C_{gt-ah} < 0.2$ μ F	$C_{g1-h+k+g2+g4+skirt}$	4.0	μ F
$C_{g1-h+gt} < 0.35$ μ F	$C_{a-h+k+g2+g4+skirt}$	9.2	μ F
	C_{a-g1}	< 0.1	μ F

Triode Section

$C_{gt-h+k+g2+g4+skirt}$	5.5	μ F
$C_{at-h+k+g2+g4+skirt}$	2.3	μ F
C_{at-gt}	1.2	μ F

OPERATING CONDITIONS

For circuits see Fig. 7, page 58

Hexode Section

$V_a = V_b$	250	V
R_1	27	K Ω
R_g	27	K Ω
R_k	180	Ω
R_{g3+gt}	47	K Ω
I_{g3+gt}	200	μ A
V_{g1}	-2.0	V
I_a	3.0	mA
I_{g2+g4}	3.0	mA
V_{g2+g4}	85	V
g_c	750	μ A/V
r_a	1.0	M Ω
R_{eq}	75	K Ω
V_{g1} (for 100 : 1 reduction in gm)	-29	V

ECH 42



4 VALVE DATA PREFERRED TYPES

B FREQUENCY CHANGERS

ECH 42 (contd.)

Triode Section

V _b	250	V
R _a	33	K Ω
I _a	4.8	mA
R _{g1-g2}	47	K Ω
I _{g1-g2}	200	μA

The effective mutual conductance under the above conditions is approximately 0.55 mA/V

CHARACTERISTICS

Triode Section

V _a	100	V
V _{g1}	0	V
I _a	10	mA
g _m	2.8	mA/V
μ	22	

LIMITING VALUES

Hexode Section

V _{a1b1} max.	550	V
V _a max.	250	V
p _a max.	1.5	W
V _{g2-g3} max.	550	V
V _{g1-g4} max.	125	V
p _{g2-g3} max.	0.3	W
I _k max.	7.0	mA
R _{g1-k} max.	3.0	M Ω
R _{g2-k} max.	3.0	M Ω
V _{b-k} max.	50	V

Triode Section

V _{a1b1} max.	550	V
V _a max.	175	V
p _a max.	0.8	W
I _k max.	6.0	mA
V _g max. (I _g = +0.3 μA)	-1.3	V
R _{g1-k} max.	3.0	M Ω



BASE :
B8A

DIMENSIONS :
L = 60 mm
D = 22 mm



4 VALVE DATA

PREFERRED TYPES

B FREQUENCY CHANGERS

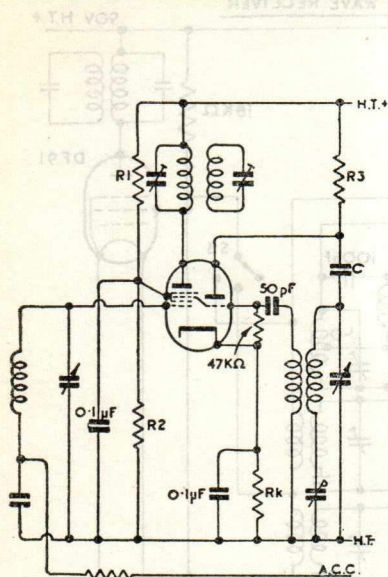


Fig. 7. A.C. Mains-operated Frequency Changer using CCH35, ECH35, ECH42 or UCH42 Triode-Hexode

Fig. 8. Mains - operated Frequency Changer using EK32 Octode

