OCTODE FREQUENCY CHANGER

FC4

Octode frequency changer for use in a.c. mains super heterodyne receivers.

FC13 & FC13C

OVERLEAF

HEATER

V_h	4.0	V
I_h	650	mA

CAPACITANCES

C_{a-g4}	0.06	pF
C_{in}	9.0	pF
C_{out}	12.5	pF
C_{g1-h}	9.4	pF
C_{g2-h}	6.1	pF
C_{g1-g4}	<0.35	pF
C_{g2-g4}	<0.25	pF

OPERATING CHARACTERISTICS

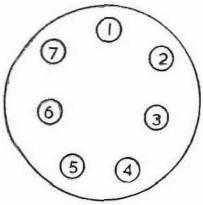
V_a	250	V
V_{g2}	90	V
V_{g3+g5}	70	V
I_a	1.6	mA
I_{g2}	2.0	mA
I_{g3+g5}	3.8	mA
V_{g4}	−1.5	V
g_c	600	μA/V
R_k	250	Ω

At V_a=200V, V_{g2}=V_{g3+g5}=70V and $V_{osc(pk)}$=12V, the grid current (I_{g4}) reaches a value of 1.0μA for V_{g4}=−0.1 to −0.95V.

LIMITING VALUES

V_a max.	250	V
V_{g2} max.	90	V
V_{g3+g5} max.	70	V
R_{g4-k} max.	2.5	MΩ

CONNECTIONS



Viewed from free end of pins

Brit. 7-Pin Base

Pin No. 1	Oscillator anode (g_2)
,, 2	Oscillator grid (g_1)
,, 3	Screen grids (g_3+g_5)
,, 4	Heater
,, 5	Heater
,, 6	Cathode, metallising and suppressor grid
,, 7	Anode
Top cap	Control grid (g_4)

DIMENSIONS

Overall length	135	mm
Overall diameter	47	mm

FC13

FC13C

OCTODE FREQUENCY CHANGER

Octode frequency changer for use in d.c./a.c. mains superheterodyne receivers.

Except for basing and dimensions the FC13 and FC13C are identical.

HEATER

I_h	200	mA
V_h	13	V

CAPACITANCES

c_{a-g4}	< 0.1	pF
c_{in}	9.0	pF
c_{out}	12.5	pF
c_{g1-k}	9.4	pF
c_{g2-k}	6.1	pF
c_{g1-g4}	< 0.35	pF
c_{g2-g4}	< 0.25	pF

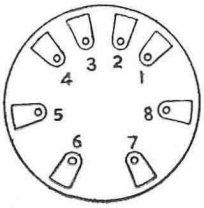
CHARACTERISTICS

V_a	200	V
V_{g2}	90	V
V_{g3+g5}	70	V
I_a	1.6	mA
I_{g2}	2.0	mA
I_{g3+g5}	3.8	mA
V_{g4}	−1.5	V
g_c	600	μA/V
R_k	250	Ω
$v_{osc(pk)}$	12	V

LIMITING VALUES

V_a max.	200	V
V_{g2} max.	90	V
V_{g3+g5} max.	90	V
R_{g4-k} max.	2	MΩ

CONNECTIONS—FC13



Viewed from underside of valve base

Contact No.	1	Metallising
,,	2	Heater
,,	3	Heater
,,	4	Cathode and suppressor grid (g_6)
,,	5	Oscillator anode (g_2)
,,	6	Oscillator grid (g_1)
,,	7	Screen grid (g_{3+5})
,,	8	Anode
Top cap		Control grid (g_4)

DIMENSIONS—FC13

Overall length	118	mm
Overall diameter	47	mm

The basing and connections of the FC13C are identical to the FC4