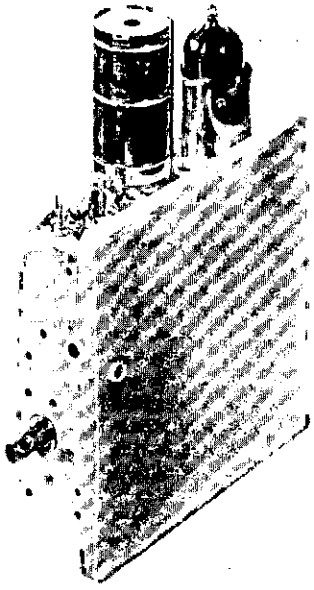
U.H.F. TELEVISION TUNER

AT6360/02

QUICK REFERENCE DATA		
For use in domestic television receivers		
Frequency range (continuously tunable)	470 to 890	Mc/s
Intermediate frequencies		
picture	39.5	Mc/s
sound	33.5	Mc/s



GENERAL

The tuning range from 470 to 890Mc/s of this tuner covers the television bands IV and V. Tuning is by means of a variable capacitor through a geared spindle having a rotation angle of approximately 967 degrees.

A PC88 in a grounded-grid circuit is used as an r.f. amplifier, and a PC86 operates as a self-oscillating mixer.

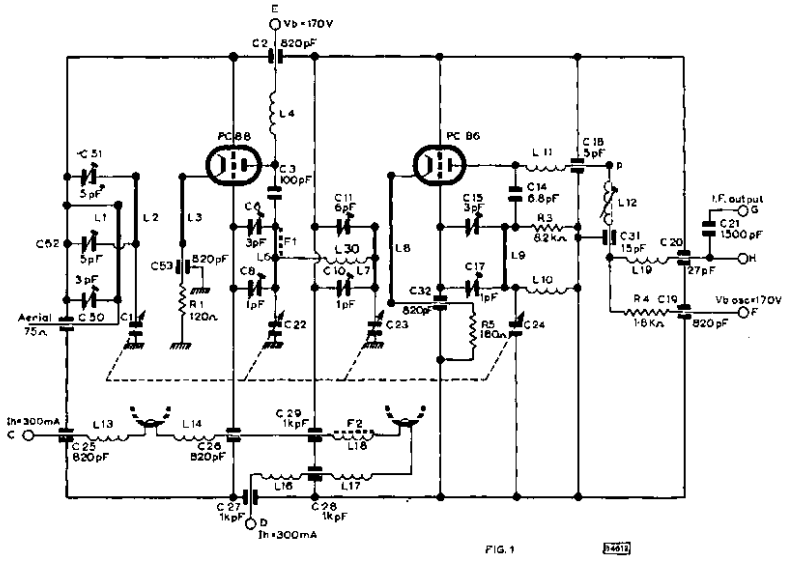


FIG. 1 B4612

Circuit diagram of tuner AT6360/02

TECHNICAL DATA

VALVES

R.F. amplifier	PC88	
Self-oscillating mixer	PC86	

TYPICAL OPERATING DATA

Oscillator supply	170	V
Preamplifier supply voltage	170	V
Total supply current (approx.)	25	mA
Valve heater current	300	mA
Valve heater voltage (each valve)	3.8	V

The position of the oscillator valve in the heater chain should be such that the r.m.s. heater-to-cathode voltage is less than 50V.

FREQUENCY RANGE	470 to 890	Mc/s
Spindle rotation angle (approx.)	967	deg

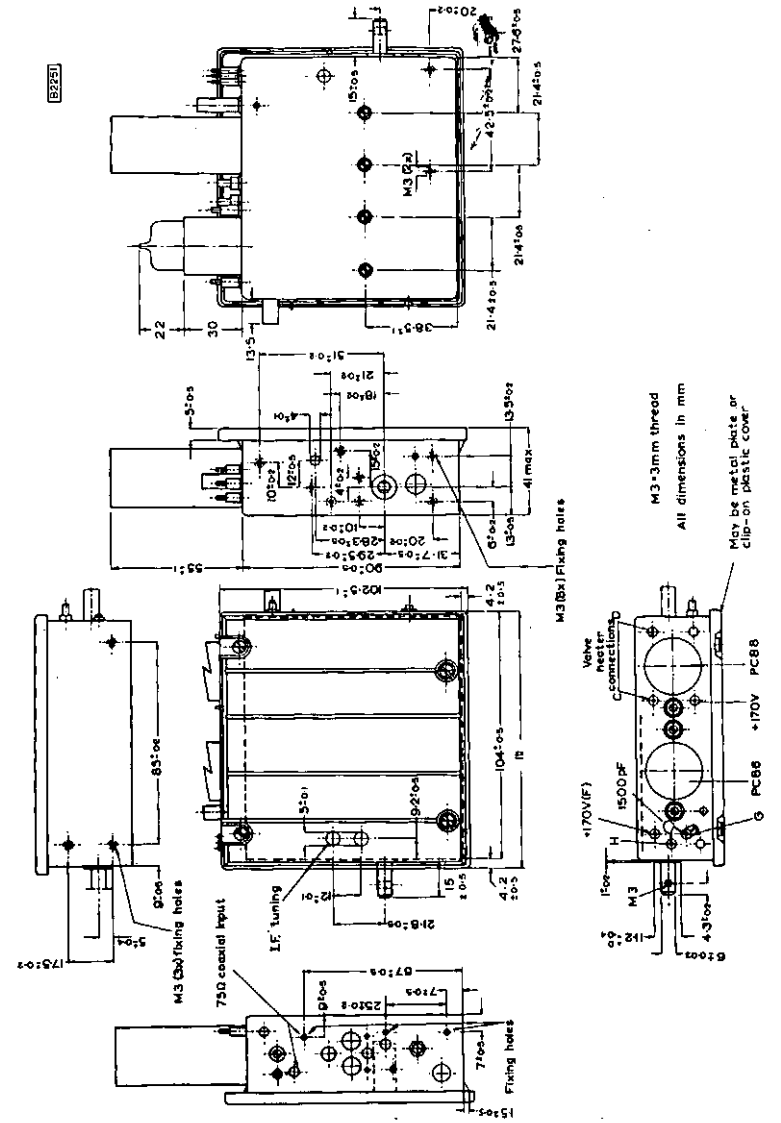
The frequency dependency is approximately linear. (See page C2).

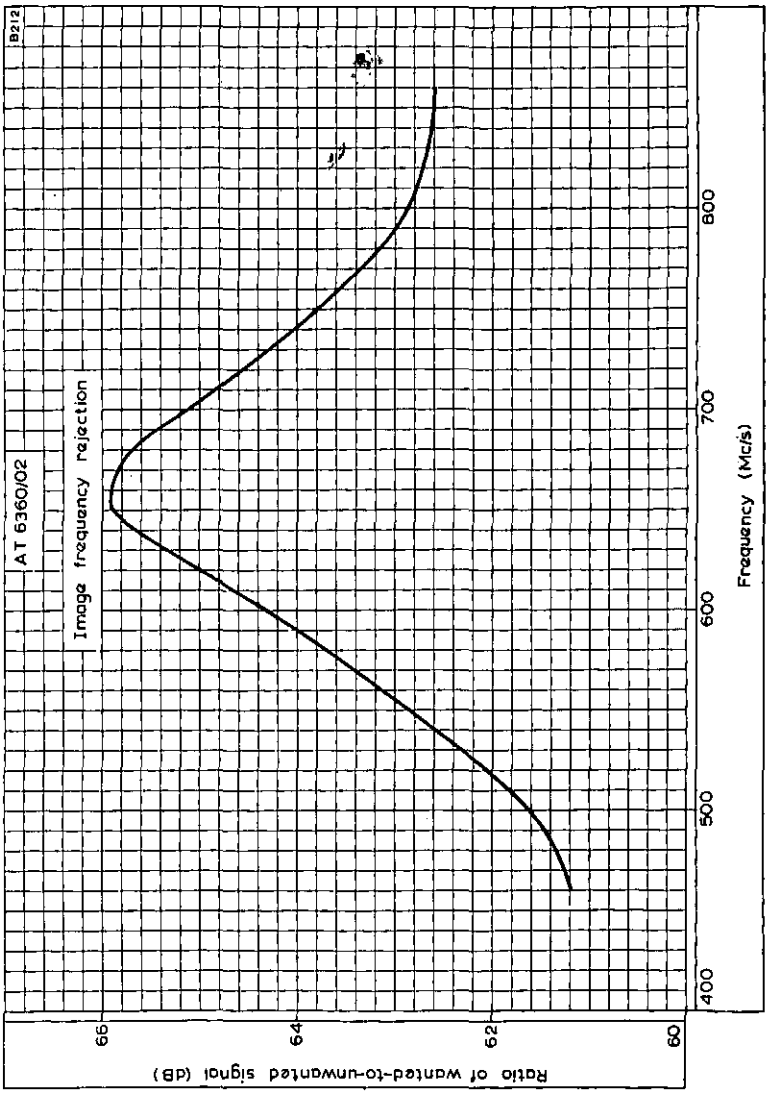
GEARS

Ratio	1:5.4	
Maximum permissible axial torque on tuner spindle	7.0	kg cm

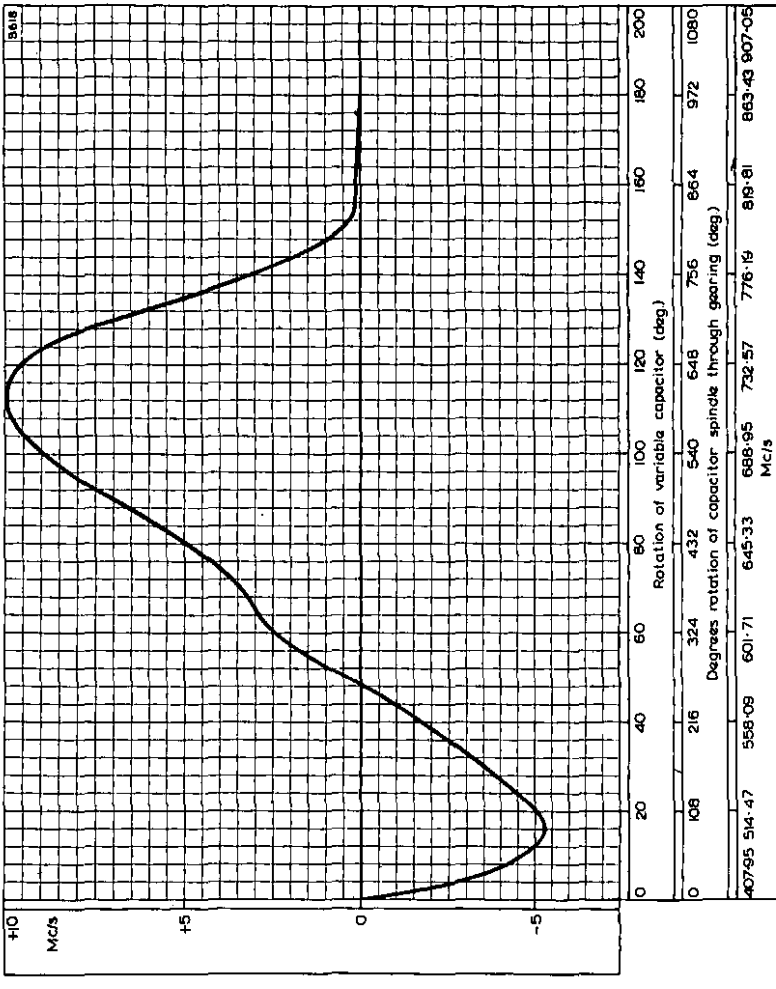
INTERMEDIATE FREQUENCIES		
Picture i.f.	39.5	Mc/s
Sound i.f.	33.5	Mc/s
The oscillator frequency is higher than the signal frequency.		
The i.f. filter is adjusted to approximately 36.5 Mc/s.		
AERIAL IMPEDANCE	75	Ω
STANDING WAVE RATIO	1:2	
R.F. BANDWIDTH at 3dB	10 to 18	Mc/s
GAIN		
For an i.f. bandwidth of 6Mc/s at 3dB		
AT 470Mc/s	>25	dB
860Mc/s	>20	dB
NOISE FIGURES		
AT 470Mc/s	<11	dB
650Mc/s	<13	dB
860Mc/s	<14	dB
IMAGE FREQUENCY REJECTION	See page C1	
Throughout bands IV and V	>58	dB
I.F. REJECTION	>60	dB
OSCILLATOR STABILITY		
At mains voltage variations of ±10%	±150	kc/s
Between 2 minutes and 2 hours after switching-on and including the effect of an additional rise of ambient temperature of 35°C.	<500	kc/s
I.F. OUTPUT	Bottom capacitive coupling	
†Total output capacitance including the coaxial connecting cable (approx.)	60	pF
RADIATION (before mounting)		
Total radiation at a distance of 10m	<450	μV/m
Chassis radiation at a distance of 10m	<50	μV/m
Oscillator voltage at i.f. output terminals	<1	mV

†This figure is dependent upon the bandwidth required.


B2251
M3 (2x)
M3 (8x) Fixing holes
750 coaxial input
I.F. tuning
M3 (3x) fixing holes
Fixing holes
M3 × 3mm thread
All dimensions in mm
May be metal plate or clip-on plastic cover
Valve heater connections
+170V(F)
1500pF
PC86
PC88
+170V
G
H
M3



TYPICAL IMAGE FREQUENCY REJECTION



TYPICAL TRACKING CURVE