




FCC APPLICATION DATA

Dec.2000

DURATRAX: 75.710MHz

Futaba Corporation

APPRO.	CHECK.	CHECK.	DESIGN
			

APPLICATION DATA

DURATRAX

GENERAL INFORMATION

A. NAME OF APPLICATION

Futaba Corporation.

ADDRESS OF APPLICANT

629 Oshiba Mobara City Chiba
JAPAN

NAME OF MANUFACTURER

Futaba Corporation.

ADDRESS OF MANUFACTURER

629 Oshiba Mobara City Chiba
JAPAN

B. IDENTIFICATION OF EQUIPMENT

AZP T2PG-75

C. INFORMATION ON PRODUCTION QUANTITY

Yes, More than one.

D. TECHNICAL DATA

See Page After 3~.

E. IDENTIFICATION LABEL

See -.

F. PHOTOGRAPHS

See -.

D. TECHNICAL DESCRIPTION-TRANSMITTER.

1. TYPE OF EMISSION

A1D.

2. FREQUENCY RANGE

a. Tuning Range.

75~76 MHz.

b. Externally selectable channels.

NONE.

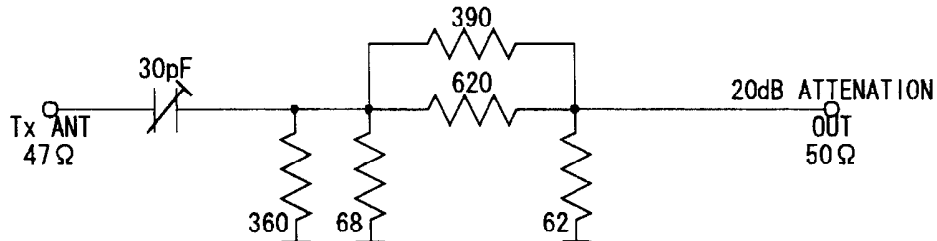
3. VARIABLE OUTPUT POWER

Output power is fixed.

4. MAXIMUM OUTPUT POWER

299mW.

ATTACHED DUMMY LOAD



METHOD OF STOP MODURATION

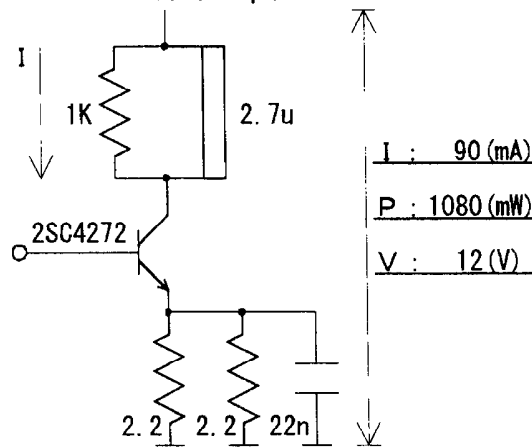
Attach a resistor 4.7KOHM between No.18 and No.19 of FP2108T.

5. FINAL RF STAGE

TEST RESULTS:

(R)	(V)	(P)	
Dummy Load	RF Voltage	Calculated Out-put power	
[OHM]	[r.m.s]	[mW]	[dBm]
47	3.75	299	24.8

Final D.C. Input



6. FUNCTION OF EACH ACTIVE DEVICE :

- Q 1 (2SC3772) ; Buffer & Driver.
- Q 2 (2SC4272F) ; Final stage R.F. Amplifier.
- IC1 (FP2108T) ; Encoder Voltage Stabilizer Wave Form Shaper.

7. TUNE-UP ALIGNMENT PROCEDURE :

- ① Adjust L3, L4, L6 and L7 for maximum power output.
- ② Turn the core of L2 c.w. until oscillation stops.
- ③ Then turn L2 c.c.w. to the point where the oscillation just starts and then it 1 turn c.c.w.
- ④ Again adjust L3, L4, L6 and L7 for maximum output.
- ⑤ Turn the core of L7 c.w. to 1/4.

8. FREQUENCY STABILIZING CIRCUITRY :

- IC1(FP2108T) ; Internal voltage regulator.
- X't a l ; Stabilizes oscillating frequency.
- C 1 (CH3p) ; Temperature compensated capacitors.
- C 4 (CH33p) ; Temperature compensated capacitors.

9. ADDITIONAL CIRCUIT DESCRIPTION

a. Type of oscillator circuit utilized.
Modified Colpitts Oscillator.

b. Suppressor of spurious radiation
from Antenna.

- L 6, L 7 (M7-D3-005) ;
 - C 20 (CH47p) ;
 - C 21 (CH15p) ;
 - C 23 (CH68p) ;
 - C 25 (CH15p) ;
- } Low Pass Filter Modification π .

c. Suppressor of spurious radiation
from other of Antenna.
None.

d. Modulation Limiter
None.

e. Audio Low Pass Filter

IC1 FP2108T

C32 15n(M)

f. Output Limiter

None.

10. DIGITAL MODULATION

None.

11. PHASE LOCKED LOOP

None.