

Ref. RF-0001
Date: June 8, 2000

**Technical Description
for
RF Receiver
MDL B12UE**

Tokai Rika Co., Ltd.

TECHNICAL DESCRIPTION

1. Name: RF Receiver

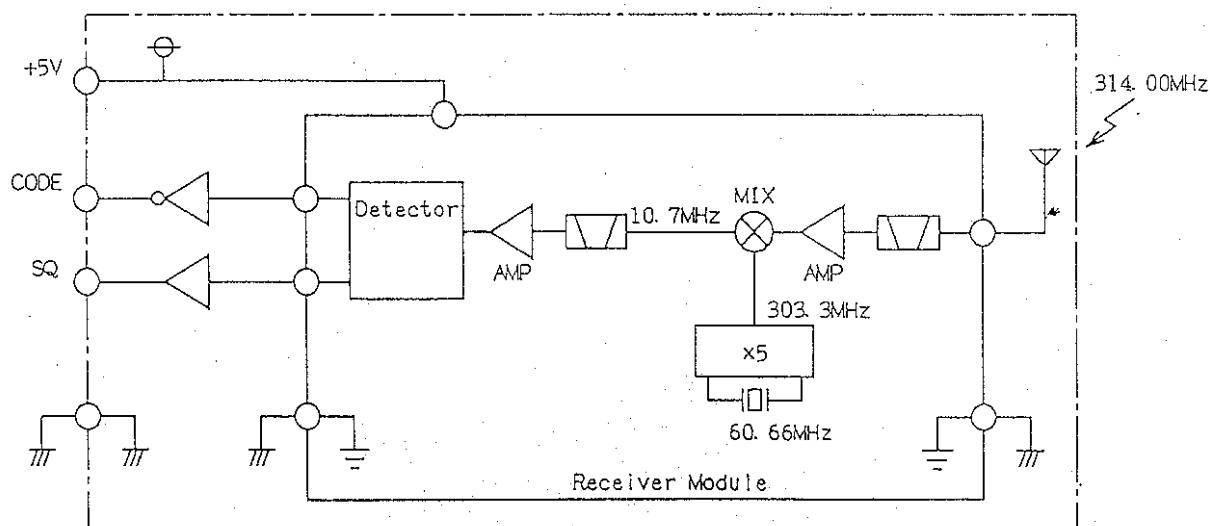
MDL: B12UE

MDL B12UE is to be installed on motor vehicles as a part of remote keyless entry system (RKE).

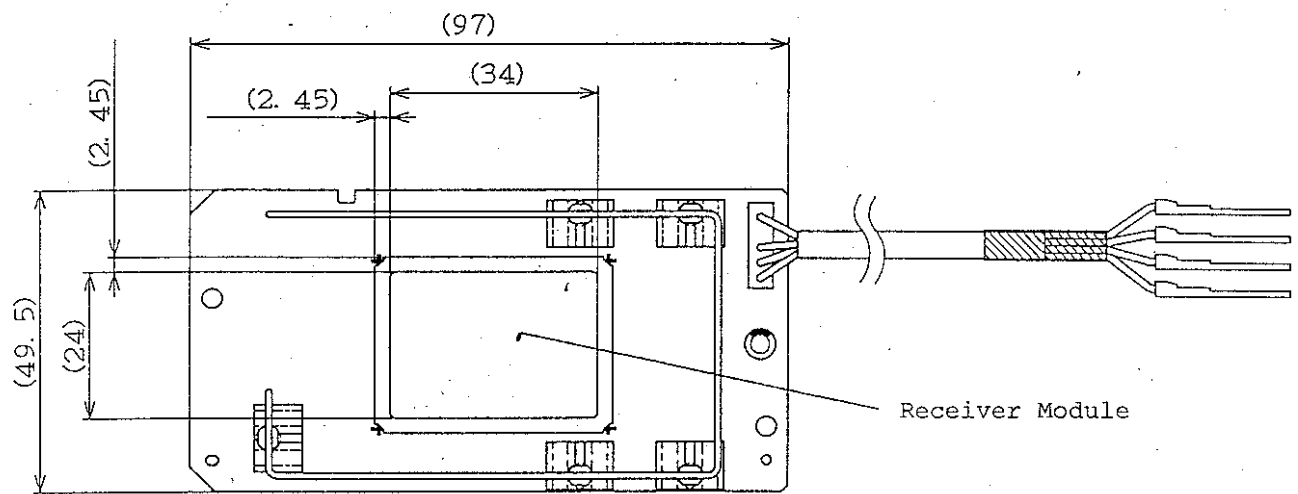
2. Specifications

Items	Specifications
rated voltage	5 V
operating voltage range	4.5V to 5.5V
operating temperature range	-40 to 100°C
current consumption in operation	20 mA or less
receiving frequency	314.00 MHz
receiving mode	super heterodyne
local oscillator (frequency)	303.30 MHz
demodulation	amplitude
receiving sensitivity	-100 dBμ@1% ber

- Block Diagram



- Appearance

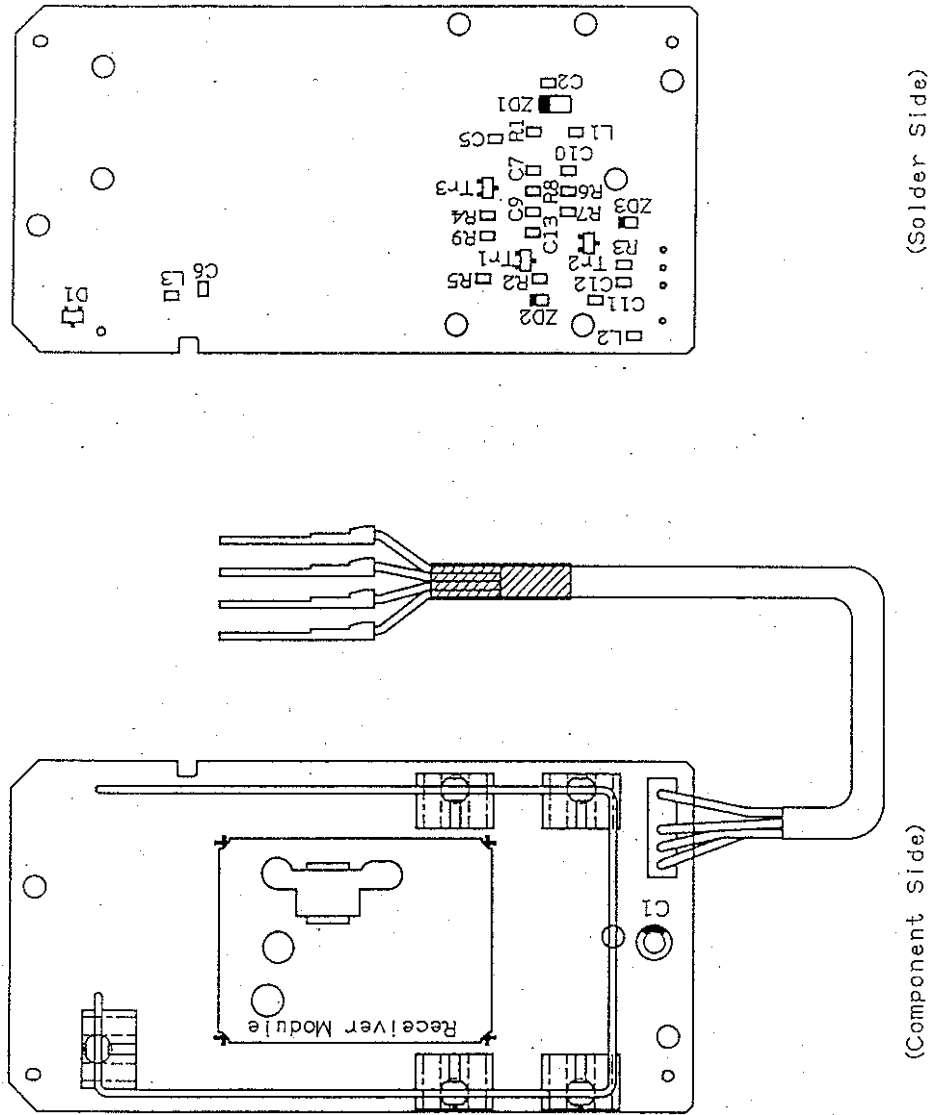


(Note: Antenna shape has not yet been fixed.)

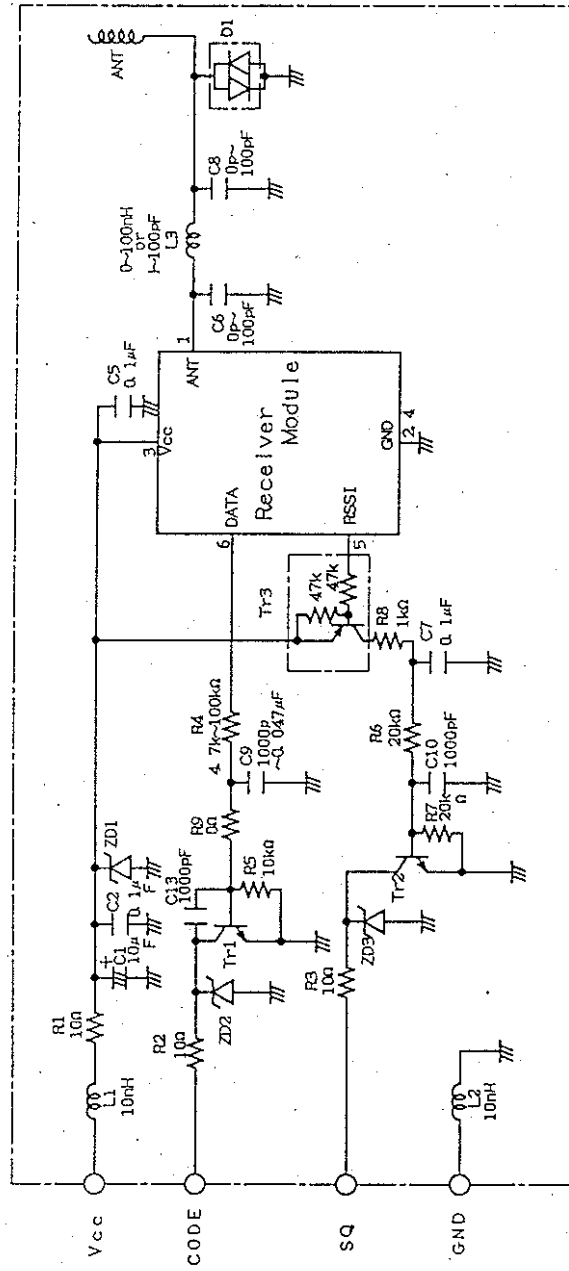
3. Operating Summary

When RF Receiver receives an amplitude-modulated radio wave signal of 314.00 MHz from Tansmitter, RF Receiver demodulates the signal and wave-shapes it into a logic level of signal and then sends the logic-level signal to another controller which is connected to RF Receiver.

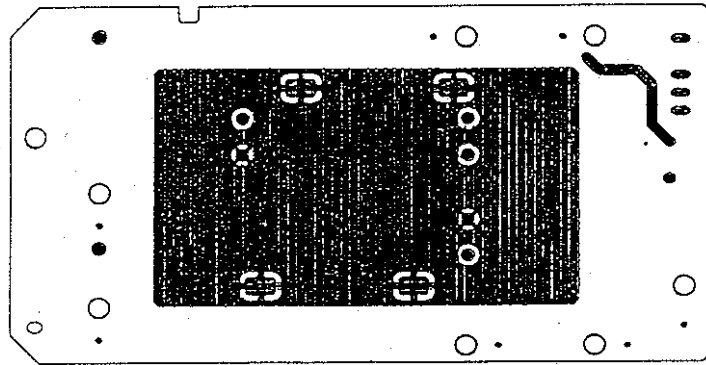
4. Drawings for RF Receiver 4.1. Component Layouts



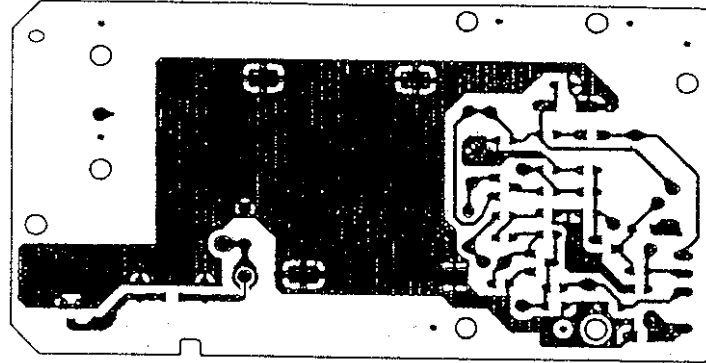
4-2. Circuit Diagram



4-3. Printed Pattern

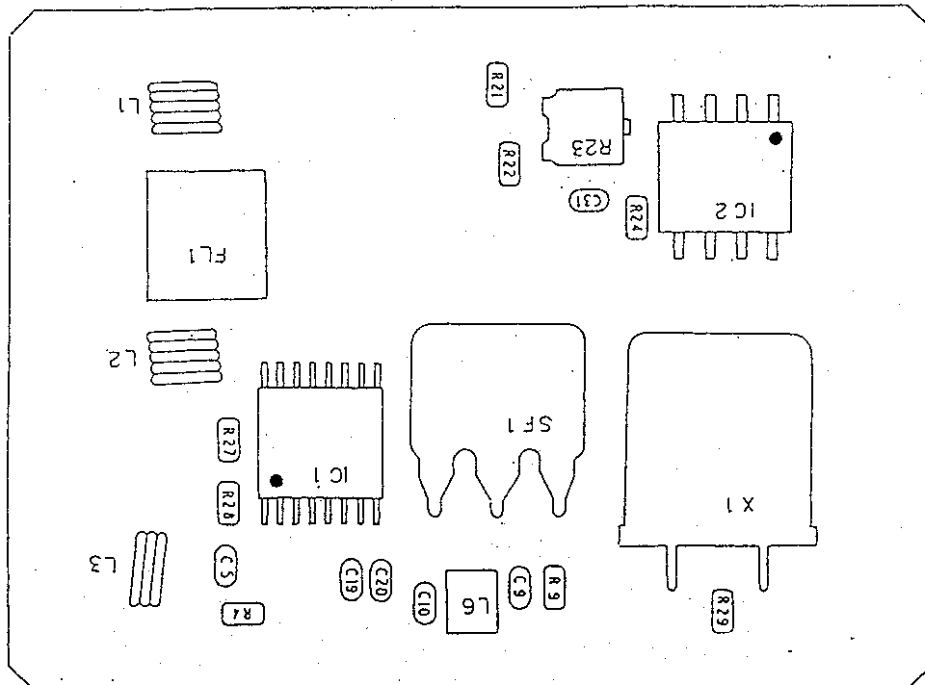


(Component Side)

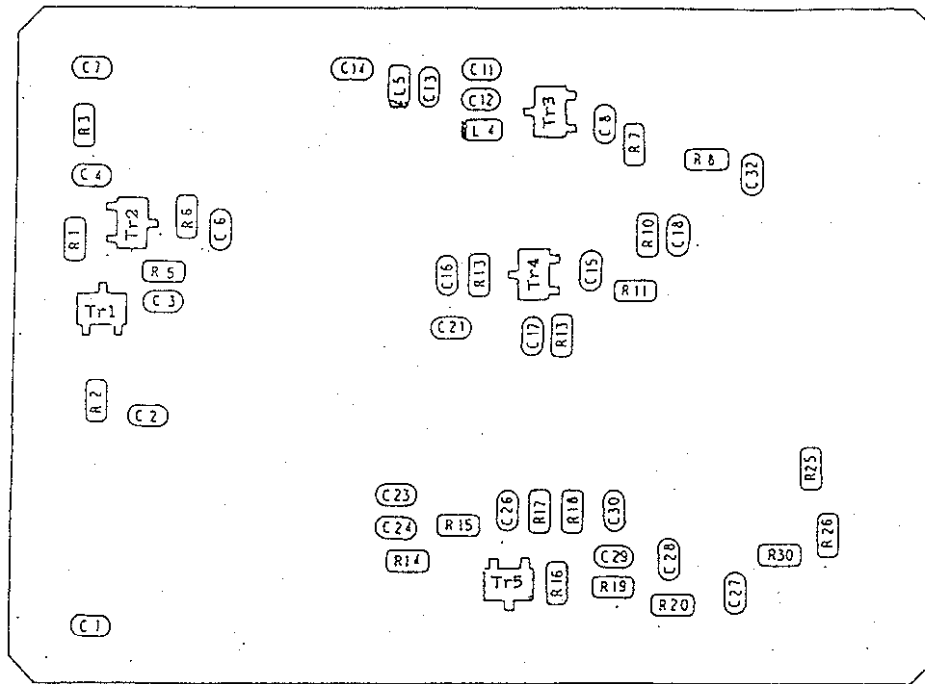


(Solder Side)

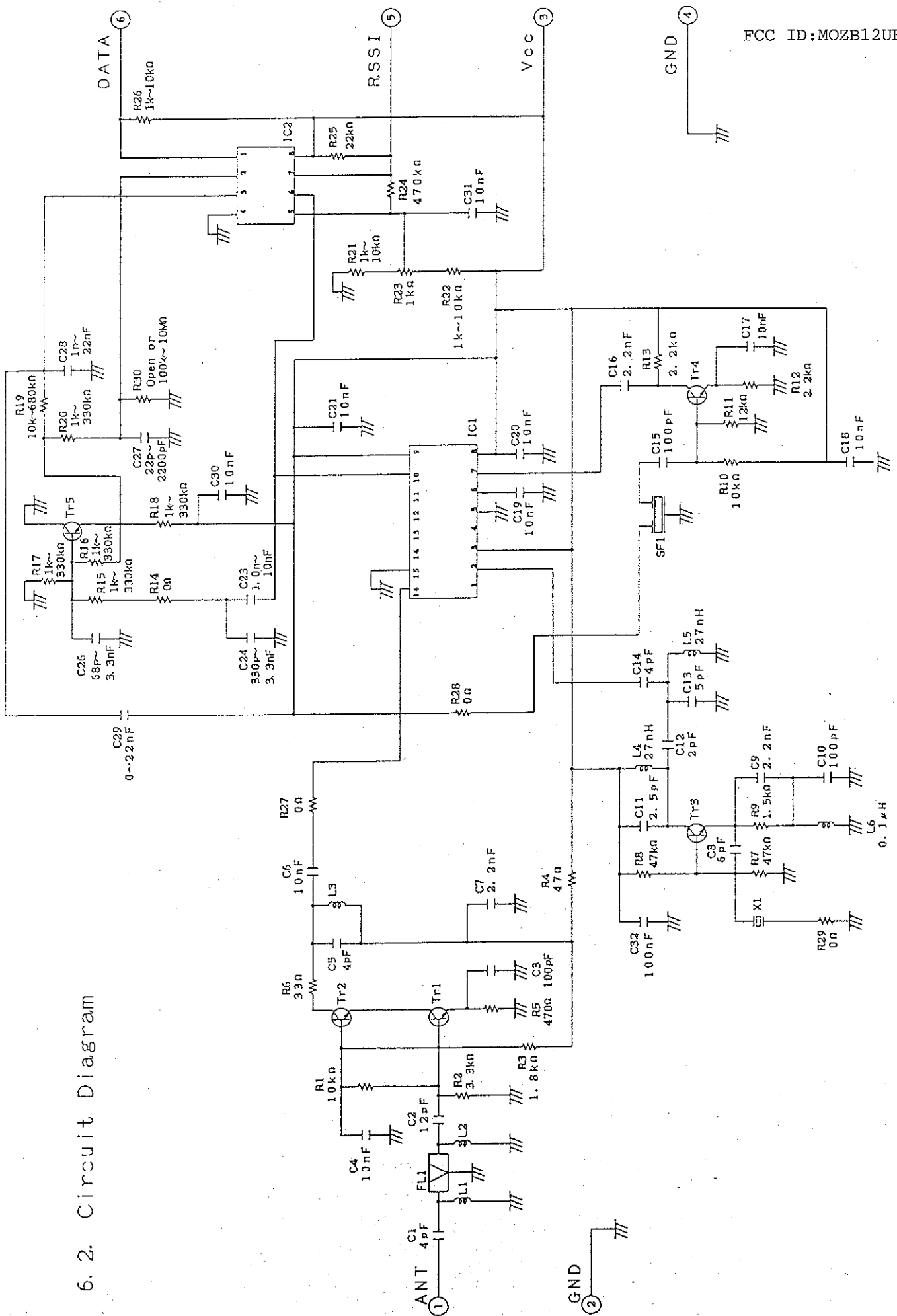
5. Drawings for Receiver Module 5.1. Component Layouts



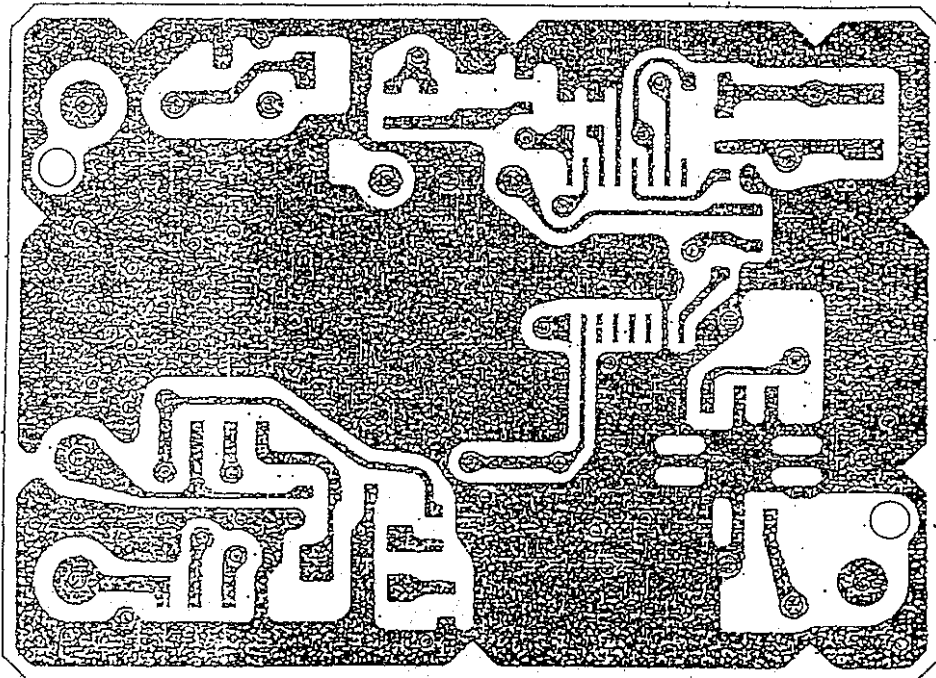
((Component Side))



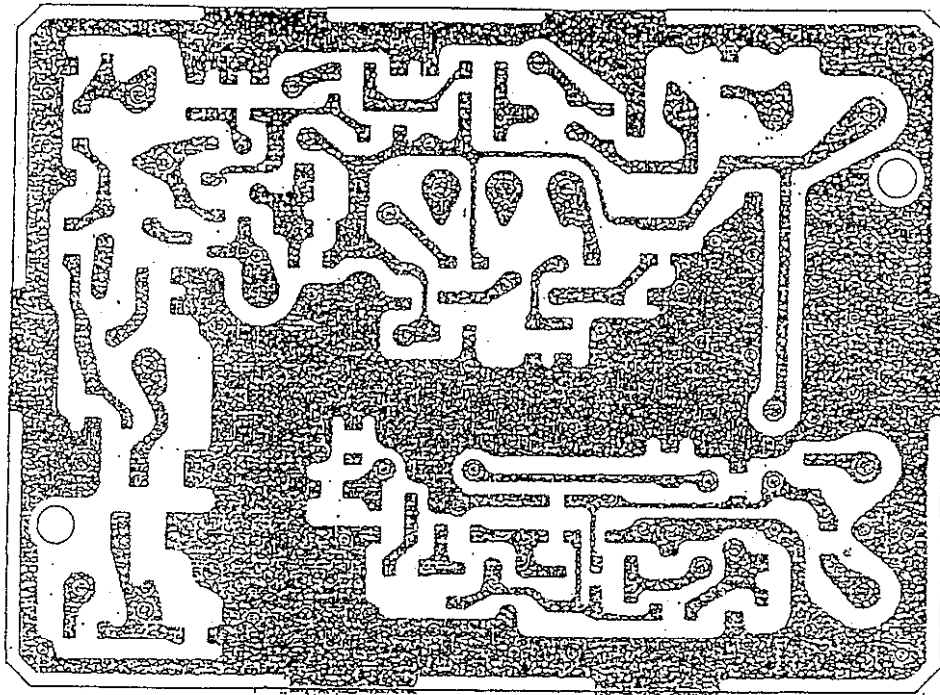
((Solder Side))



5-3. Printed Pattern



(Component Side)



(Solder Side)