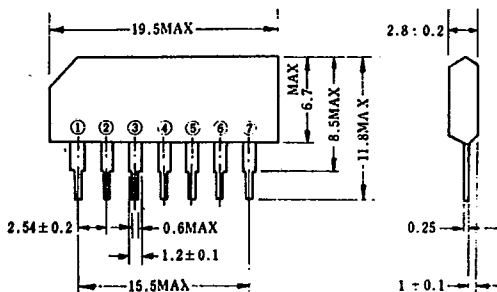


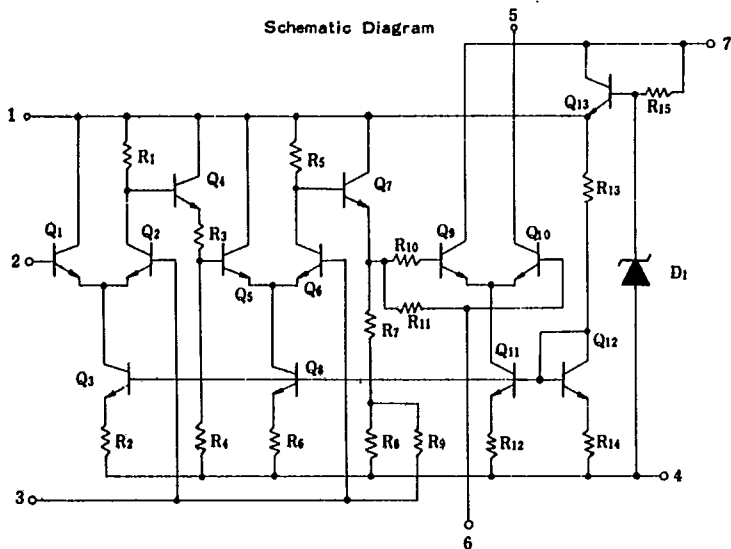
Outline (Unit : mm)

Silicon monolithic IC intended for use as a three-stage FM IF amplifier having exceptionally high voltage gain and limiting characteristics. From pin 1 the stabilized voltage can be applied to the mixer stage.

|   |            |   |                   |
|---|------------|---|-------------------|
| 1 | BY PASS    | 5 | OUT PUT           |
| 2 | INPUT HIGH | 6 | BY PASS           |
| 3 | INPUT LOW  | 7 | V <sub>cc</sub> ' |
| 4 | GND        |   |                   |



Schematic Diagram



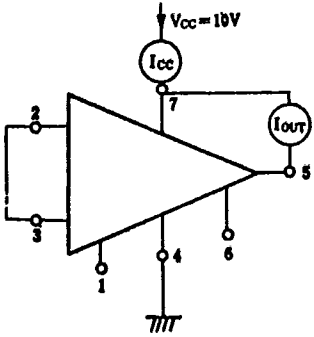
Electrical Characteristics (T<sub>a</sub> 25°C, V<sub>cc</sub> 10V)

| Item             | Conditions   | Circuit | MIN. | TYP. | MAX. | Unit |
|------------------|--|---------|------|------|------|------|
| I <sub>cc</sub>  | D.C. Current   | 1.      | 8.0  | 12.5 | 17.0 | mA   |
| I <sub>out</sub> | ② D.C. Current   | 1.      | 0.9  | 1.6  | 2.3  | mA   |
| V <sub>I</sub>   | ①  |         | 4.4  | 5.1  | 5.8  | V    |
| A <sub>v</sub>   | f=10.7MHz, R <sub>c</sub> =50Ω<br>R <sub>L</sub> =1 KΩ, V <sub>i</sub> =40dB | 2.      | 60   | 66   | 72   | dB   |
| R <sub>in</sub>  | f=10.7MHz  | 3.      | —    | 10   | —    | KΩ   |
| C <sub>in</sub>  | f=10.7MHz  | 3.      | —    | 5    | —    | pF   |
| r <sub>out</sub> | f=10.7MHz  | 4.      | —    | 30   | —    | KΩ   |
| C <sub>out</sub> | f=10.7MHz  | 4.      | —    | 3    | —    | pF   |

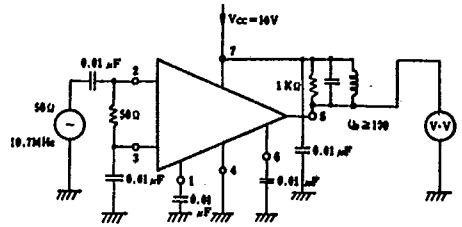
Absolute Maximum Ratings (T<sub>a</sub>=25°C)

| V <sub>cc</sub>  | 15       | V  |
|------------------|----------|----|
| V <sub>IN</sub>  | ±3.0     | V  |
| P <sub>d</sub>   | 300      | mW |
| T <sub>op</sub>  | -20~+75  | °C |
| T <sub>stg</sub> | -40~+125 | °C |

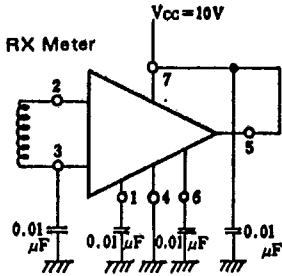
### 1 Test Circuits



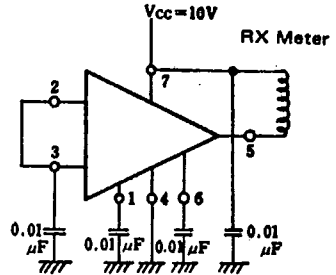
### 2 10.7MHz Gain Test Circuit



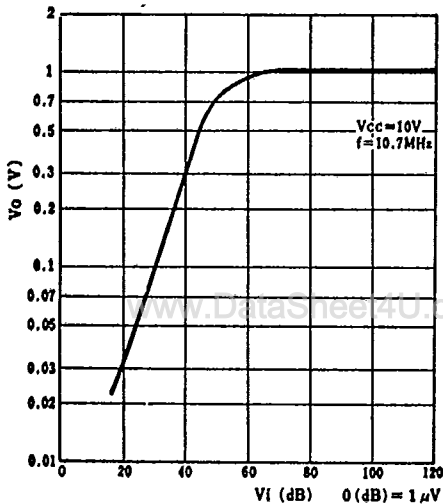
### 3 R in-C in Test Circuit



### 4 R out-C out Test Circuit



Limiting Curve



Voltage Gain vs Frequency

