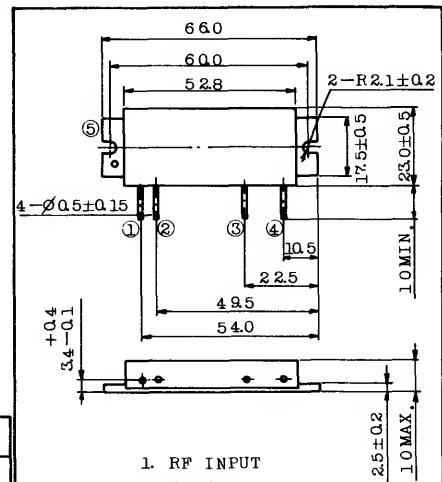


800MHz UHF POWER AMPLIFIER MODULE (FM)

Unit in mm

FEATURES:

- Output Power : $P_o \geq 15W$
- Minimum Gain : $G_p = 18.7dB$
- Efficiency : $\eta_T \geq 30\%$
- 50Ω Input/Output Impedance
- Guaranteed Stability

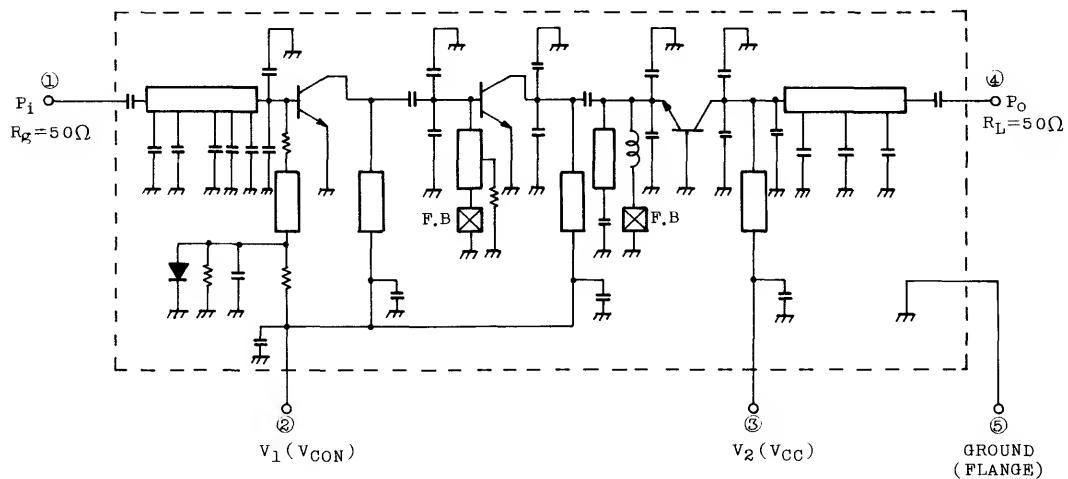
MAXIMUM RATINGS ($T_c=25^\circ C$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT | | | | |
|----------------------------------|---------------------|-----------|------|---------------|--|--|------|
| DC Supply Voltage | V _{CC} | 15 | V | | | | |
| DC Supply Voltage | V _{CON} | 15 | V | | | | |
| RF Input Power | P _i | 300 | mW | | | | |
| Operating Case Temperature Range | T _c (OP) | -30 ~ 100 | °C | J E D E C | | | - |
| Storage Temperature Range | T _{stg} | -40 ~ 110 | °C | E I A J | | | - |
| | | | | T O S H I B A | | | 5-53 |

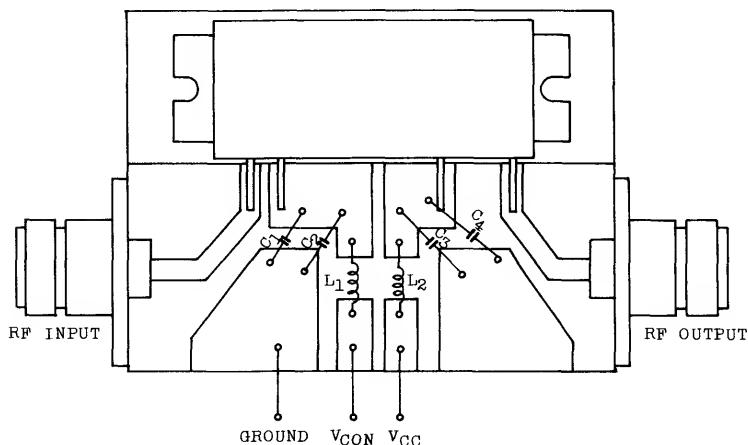
CHARACTERISTICS ($T_c=25^\circ C$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------|--------------------------------|--|--|------|------|------|
| Frequency Range | f _{range} | - | 806 | - | 825 | MHz |
| Output Power | P _i | | - | 80 | 200 | mW |
| Power Gain | G _p | P _o =15W | 18.7 | 22.7 | - | dB |
| Total Efficiency | η _T | V _{CC} =12.5V, V _{CON} =1.25V | 30 | 35 | - | % |
| Input VSWR | V _{SWR} _{in} | Z _g =Z ₁ =50Ω | - | 1.5 | 2.5 | - |
| Harmonics | HRM | | - | -30 | -25 | dB |
| Load Mismatch | - | V _{CC} =15V, V _{CON} =15V P _o =18W VSWR load 20:1 all phase | No Degradation | | | - |
| Stability | - | V _{CC} =12.5V, P _i =100 to 200mW V _{CON} =0 ~ 15V VSWR load 3:1 all phase | All spurious output than 60dB below desired signal | | | - |

SCHEMATIC



TEST MOUNT



$C_1, C_3 : 1500\text{pF}$

$C_2, C_4 : 1\mu\text{F}$

$L_1, L_2 : \phi 0.8 \text{ Ag PLATED WIRE, 8T 5ID}$

