

TOSHIBA RF POWER AMPLIFIER MODULE

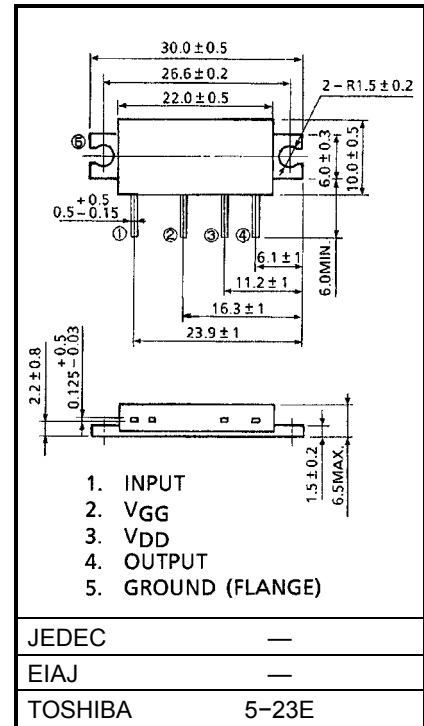
S-AU68L

UHF BAND FM POWER AMPLIFIER MODULE

Unit in mm

MAXIMUM RATINGS (Tc = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------------------------|----------------------|---------|------|
| DC Supply Voltage | V _{DD} | 17 | V |
| DC Supply Voltage | V _{GG} | 6 | V |
| Input Power | P _i | 50 | mW |
| Output Power | P _o | 12 | W |
| Total Current | I _T | 3 | A |
| Operating Case Temperature Range | T _{c (opr)} | -30~100 | °C |
| Storage Temperature Range | T _{stg} | -40~110 | °C |



Weight: 3.5g

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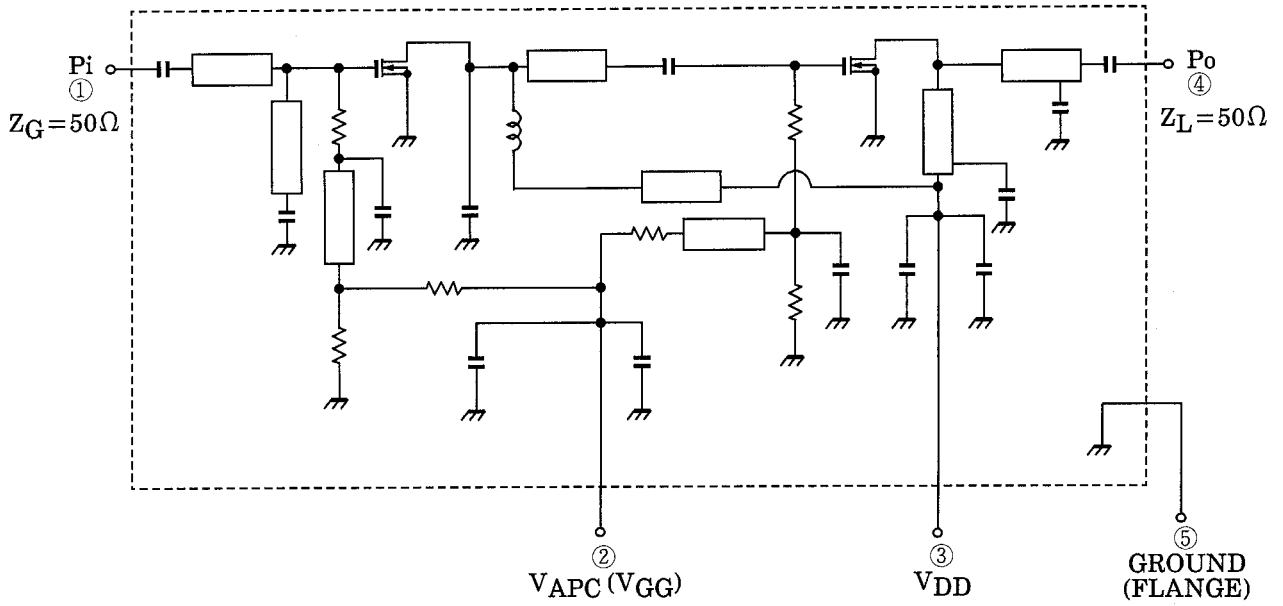
ELECTRICAL CHARACTERISTICS (T_c = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT | |
|------------------|--------------------|--|--|------|------|------|----|
| Frequency Range | f _{range} | — | 400 | — | 420 | MHz | |
| Output Power (1) | P _o (1) | V _{GG} = 4V, P _i = 20mW Z _G = Z _L = 50Ω | V _{DD} = 9.6V | 7 | — | — | W |
| Output Power (2) | P _o (2) | | V _{DD} = 6.0V | 2.7 | — | — | |
| Total Efficiency | η _T | V _{DD} = 9.6V, P _i = 20mW P _o = 7W (V _{GG} = adjust) Z _G = Z _L = 50Ω | | 35 | — | — | % |
| Input VSWR | VSWR _{in} | | | — | — | 5.0 | — |
| Harmonics | HRM | | | — | — | -25 | dB |
| Load Mismatch | — | V _{DD} = 15V, P _i = 20mW P _o = 7W (V _{GG} = adjust) VSWR LOAD 20: 1 ALL PHASE | No Degradation | | | — | |
| Stability | — | V _{DD} = 3.5~15.7V, V _{GG} = 0~4V P _o < 12W, P _i = 20mW VSWR LOAD 2: 1 ALL PHASE | All spurious output than 60dB below desired signal | | | — | |

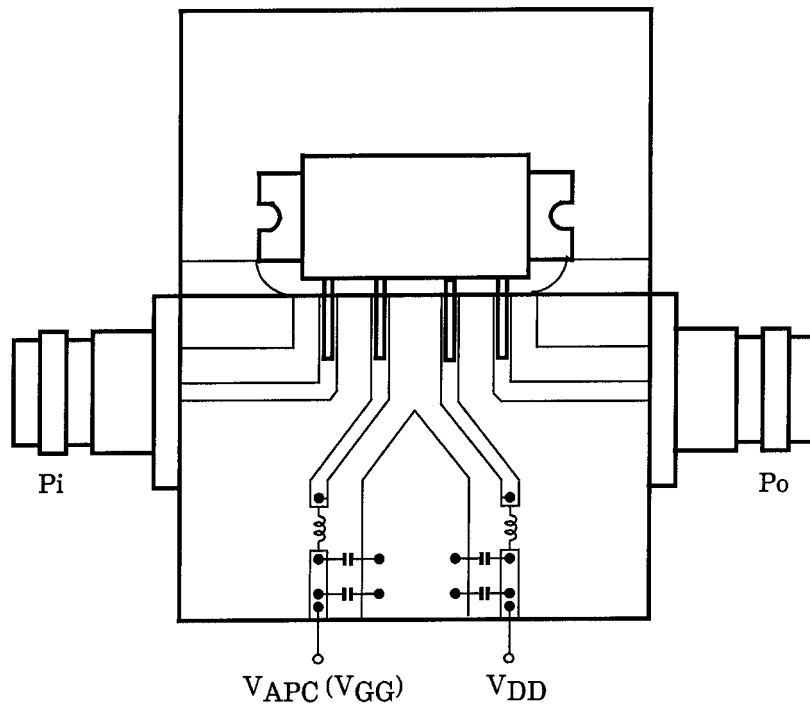
CAUTION

- This product has intersetting cap. Please pay attention for exceeding stress and foreign matter in your application. And not to take away the cap.
- Do not intermingle with normal industrial or domestic waste.
- This product is electrostatic sensitivity, please handle with caution.

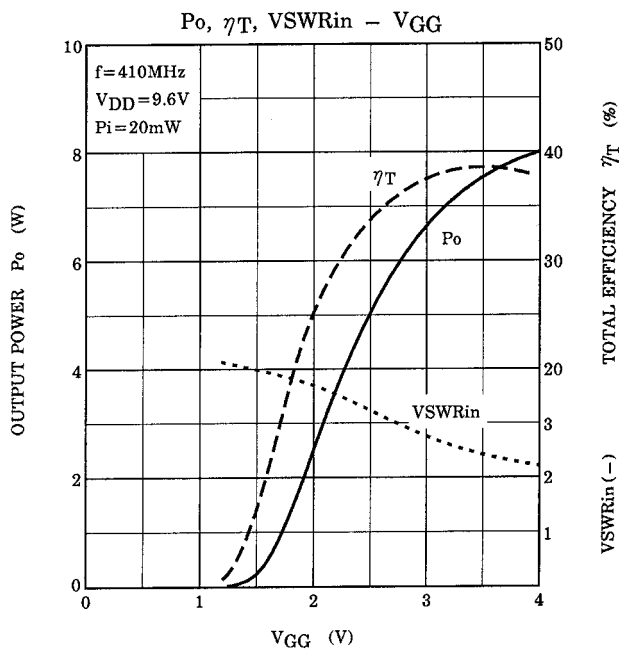
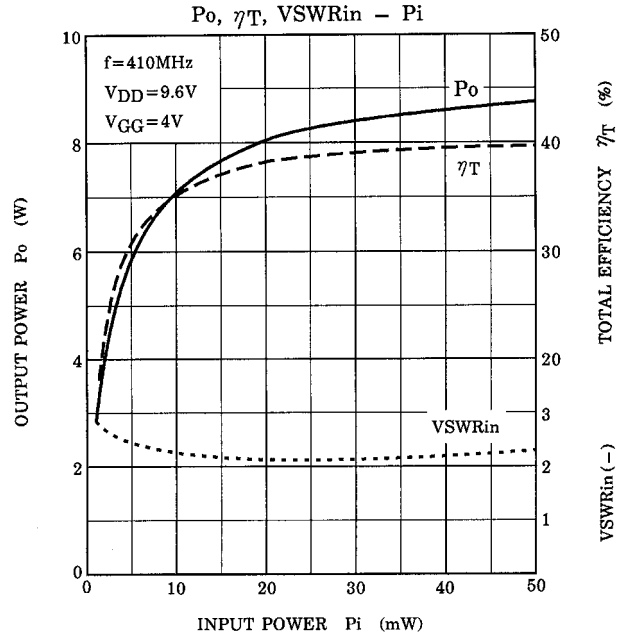
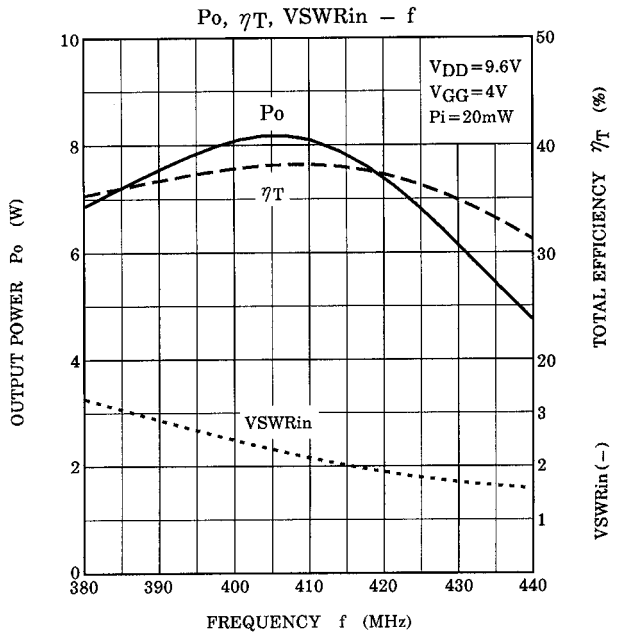
SCHEMATIC



TEST FIXTURE



C : 10000pF, 10 μ F PARALLEL
 L : ϕ 0.5, 3ID, 5T ENAMEL WIRE



CAUTION

These are only typical curves and devices are not necessarily guaranteed at these curves.