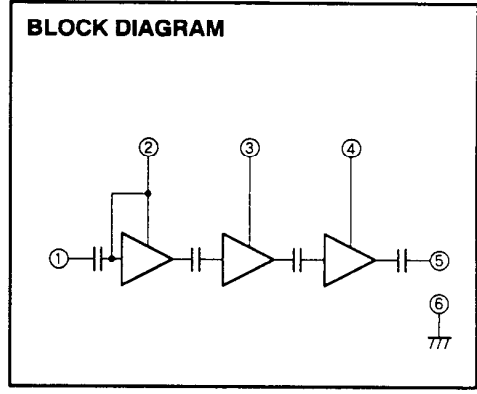
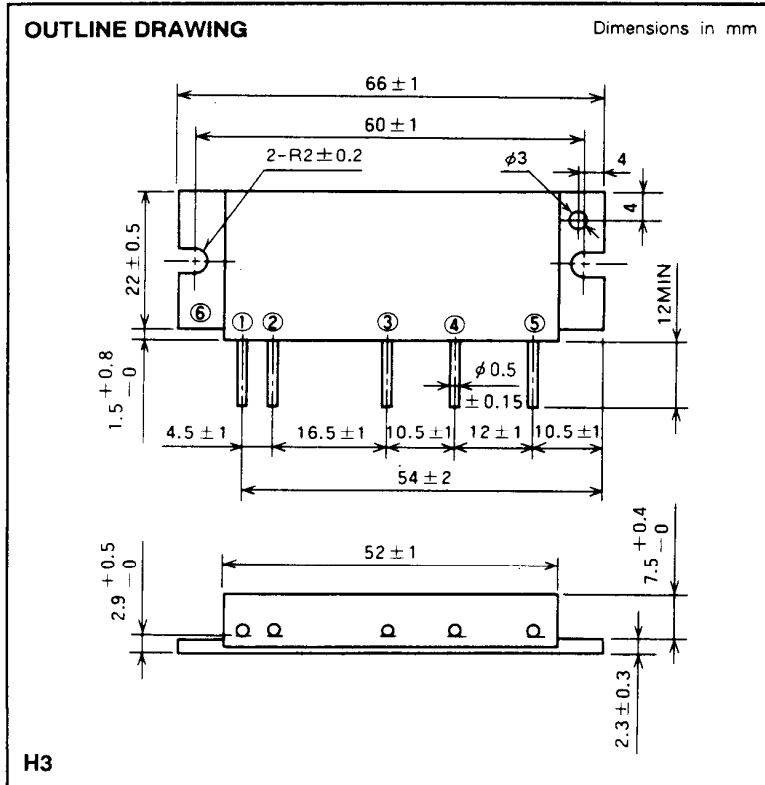


# M57704H

450-470MHz, 12.5V, 13W, FM MOBILE RADIO



- PIN :
- ① Pin : RF INPUT
  - ② Vcc1 : 1st. DC SUPPLY
  - ③ Vcc2 : 2nd. DC SUPPLY
  - ④ Vcc3 : 3rd. DC SUPPLY
  - ⑤ Po : RF OUTPUT
  - ⑥ GND : FIN

**ABSOLUTE MAXIMUM RATINGS** (Tc = 25°C unless otherwise noted)

| Symbol               | Parameter                  | Conditions                             | Ratings     | Unit |
|----------------------|----------------------------|--|-------------|------|
| Vcc                  | Supply voltage             |  | 17          | V    |
| Icc                  | Total current              |  | 5           | A    |
| P <sub>in(max)</sub> | Input power                | Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω | 0.4         | W    |
| P <sub>O(max)</sub>  | Output power               | Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω | 20          | W    |
| T <sub>C(OP)</sub>   | Operation case temperature |  | - 30 to 110 | °C   |
| T <sub>stg</sub>     | Storage temperature        |  | - 40 to 110 | °C   |

Note. Above parameters are guaranteed independently.

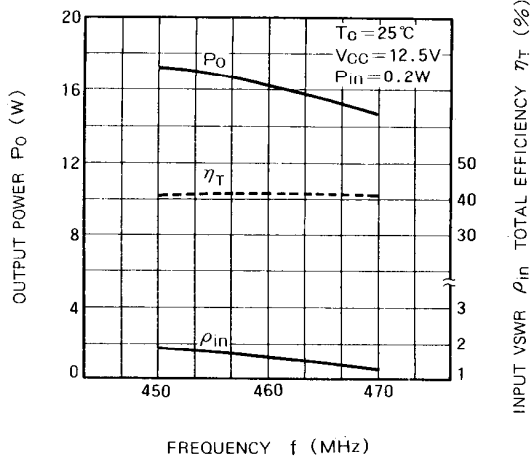
**ELECTRICAL CHARACTERISTICS** (Tc = 25°C unless otherwise noted)

| Symbol          | Parameter           | Test conditions  | Limits                    |     | Unit |
|-----------------|---------------------|--|---------------------------|-----|------|
|                 |                     |  | Min                       | Max |      |
| f               | Frequency range     | P <sub>in</sub> = 0.2W<br>Vcc = 12.5V<br>Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω  | 450                       | 470 | MHz  |
| P <sub>O</sub>  | Output power        |  | 13                        |     | W    |
| η <sub>T</sub>  | Total efficiency    |  | 35                        |     | %    |
| 2fo             | 2nd. harmonic       |  | - 30                      |     | dBc  |
| ρ <sub>in</sub> | Input VSWR          |  | 2.8                       |     | -    |
| -               | Load VSWR tolerance | Vcc = 15.2V,<br>P <sub>O</sub> = 14W (P <sub>in</sub> : controlled)<br>Load VSWR=20:1(All phase), 2sec.<br>Z <sub>G</sub> = 50 Ω | No degradation or destroy |     | -    |

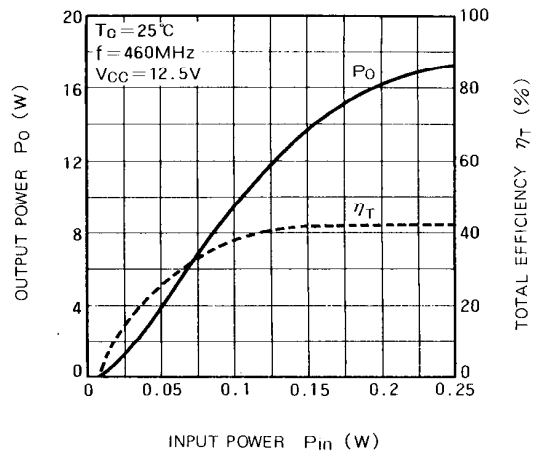
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

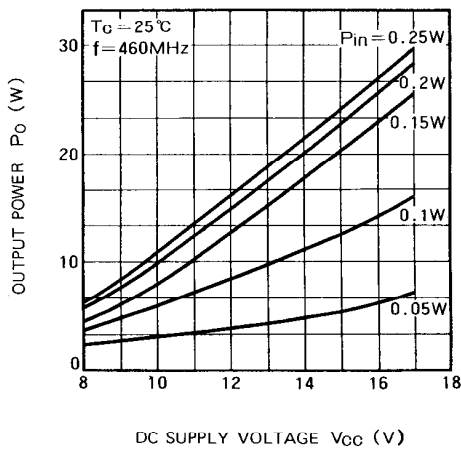
OUTPUT POWER TOTAL EFFICIENCY INPUT VSWR VS. FREQUENCY



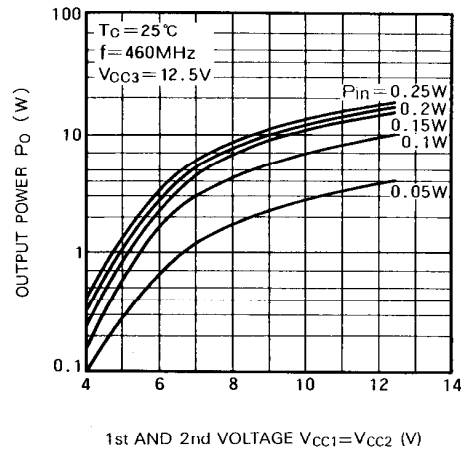
OUTPUT POWER TOTAL EFFICIENCY VS. INPUT POWER



OUTPUT POWER VS. DC SUPPLY VOLTAGE



OUTPUT POWER VS. 1st AND 2nd VOLTAGE



INPUT IMPEDANCE OUTPUT IMPEDANCE

