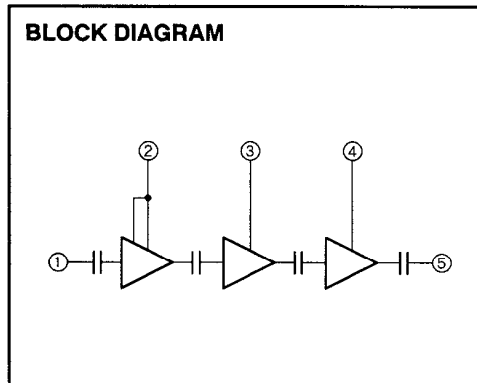
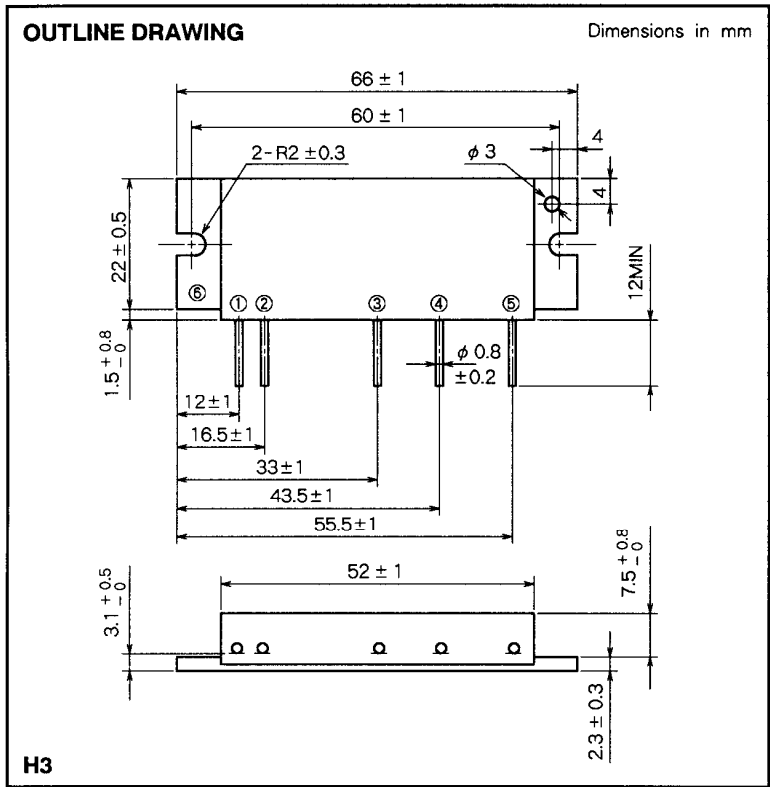


# M57729H

450-470MHz, 12.5V, 30W, FM MOBILE RADIO



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

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

| Symbol   | Parameter                  | Conditions     | Ratings     | Unit |
|----------|----------------------------|----------------|-------------|------|
| Vcc      | Supply voltage             |                | 17          | V    |
| Icc      | Total current              |                | 10          | A    |
| Pin(max) | Input power                | ZG = ZL = 50 Ω | 0.4         | W    |
| Po(max)  | Output power               | ZG = ZL = 50 Ω | 40          | W    |
| Tc(OP)   | Operation case temperature |                | - 30 to 110 | °C   |
| Tstg     | Storage temperature        |                | - 40 to 110 | °C   |

Note. Above parameters are guaranteed independently.

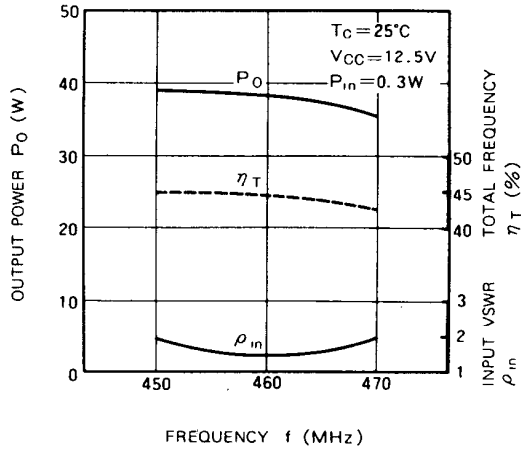
**ELECTRICAL CHARACTERISTICS** (Tc = 25 °C unless otherwise noted)

| Symbol          | Parameter           | Test conditions   | Limits                    |      | Unit |
|-----------------|---------------------|---|---------------------------|------|------|
|                 |                     |   | Min                       | Max  |      |
| f               | Frequency range     | Pin = 0.3W<br>Vcc = 12.5V<br>ZG = ZL = 50 Ω   | 450                       | 470  | MHz  |
| Po              | Output power        |   | 30                        |      | W    |
| η <sub>T</sub>  | Total efficiency    |   | 40                        |      | %    |
| 2fo             | 2nd. harmonic       |   |                           | - 30 | dBc  |
| 3fo             | 3rd. harmonic       |   |                           | - 30 | dBc  |
| ρ <sub>in</sub> | Input VSWR          |   |                           | 2.8  | -    |
| -               | Load VSWR tolerance | Vcc = 15.2V,<br>Po = 30W (Pin : controlled)<br>Load VSWR=20:1 (All phase), 2sec.<br>ZG = 50 Ω | No degradation or destroy |      | -    |

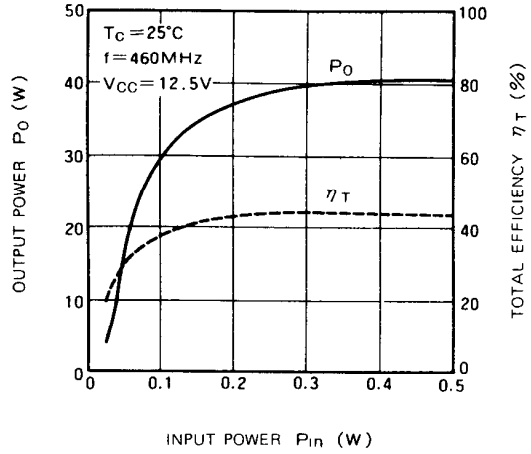
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

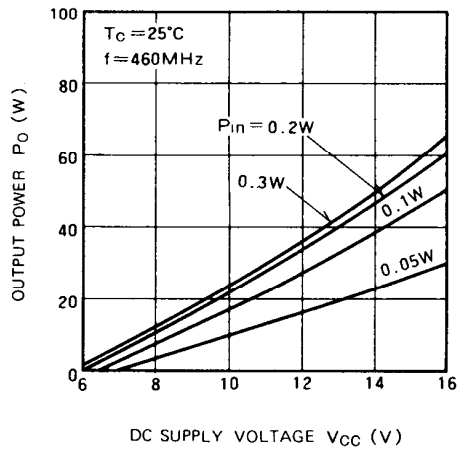
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY (M57729H)



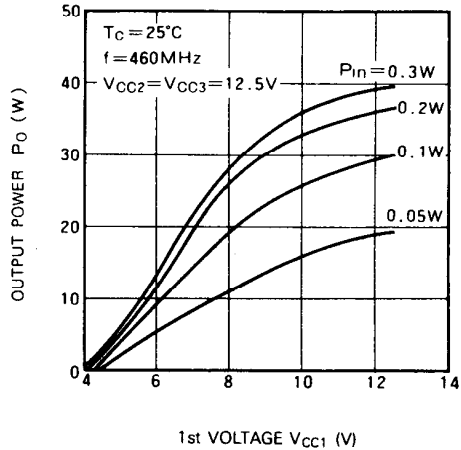
OUTPUT POWER, TOTAL EFFICIENCY, VS. INPUT POWER (M57729H)



OUTPUT POWER VS. DC SUPPLY VOLTAGE (M57729H)



OUTPUT POWER VS. 1st VOLTAGE (M57729H)



OUTPUT IMPEDANCE, INPUT IMPEDANCE VS. FREQUENCY (M57729H)

