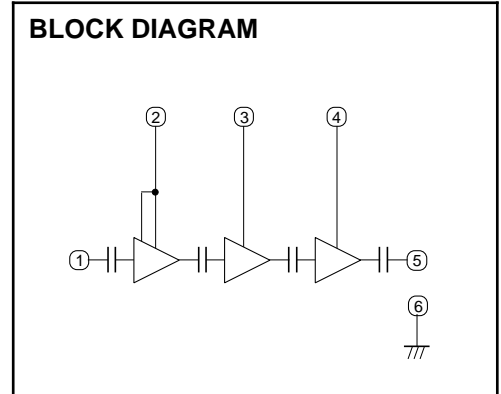
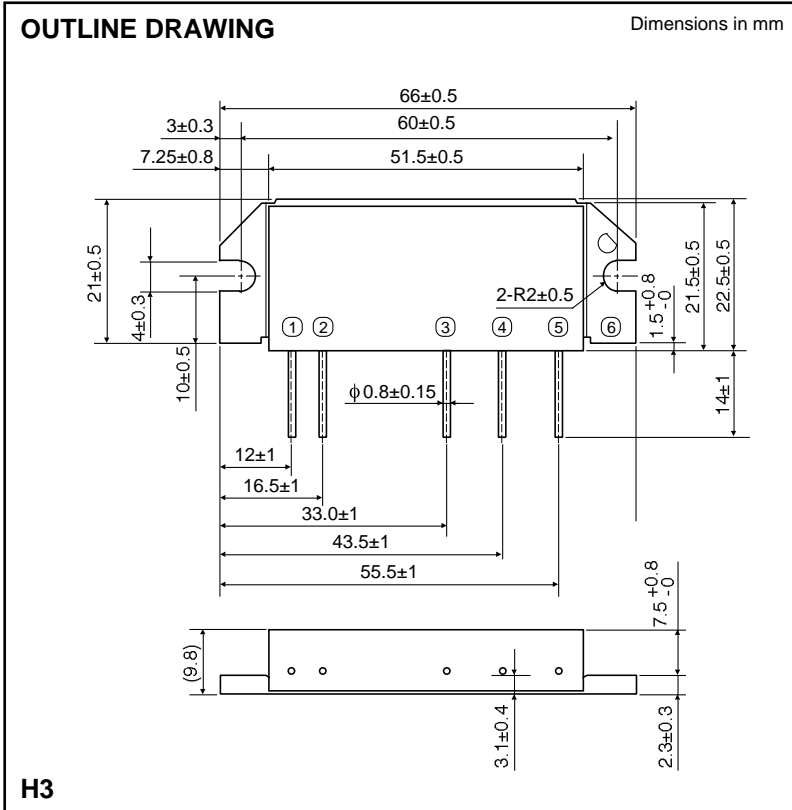


MITSUBISHI RF POWER MODULE  
**M68706H**

300-308MHz, 12.5V, 20W, 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             | ZG=ZL=50              | 17          | V    |
| IC                    | Total current              | ZG=ZL=50              | 10          | A    |
| P <sub>in</sub> (max) | Input power                | ZG=ZL=50 , VCC1 12.5V | 600         | mW   |
| P <sub>O</sub> (max)  | Output power               | ZG=ZL=50 , VCC1 12.5V | 30          | W    |
| T <sub>C</sub> (OP)   | Operation case temperature | ZG=ZL=50 , VCC1 12.5V | -30 to +110 | °C   |
| T <sub>stg</sub>      | Storage temperature        |                       | -40 to +110 | °C   |

Note. Above each maximum ratings 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> =300mW,<br>VCC1, 2, 3=12.5V, ZG=ZL=50   | 300                          | 308 | MHz  |
| P <sub>O</sub>  | Output power        |   | 20                           |     | W    |
| η               | Total efficiency    |   | 40                           |     | %    |
| 2f <sub>o</sub> | 2nd. harmonic       |   |                              | -30 | dBc  |
| 3f <sub>o</sub> | 3rd. harmonic       |   |                              | -30 | dBc  |
| in              | Input VSWR          |   |                              | 2.8 | -    |
| -               | Load VSWR tolerance | VCC1, 2, 3=15.2V,<br>P <sub>O</sub> =20W (P <sub>in</sub> :Controlled), ZG=50 ,<br>Load VSWR=20:1 (All phase) | No degradation or<br>destroy |     | -    |

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

**TYPICAL PERFORMANCE DATA**

