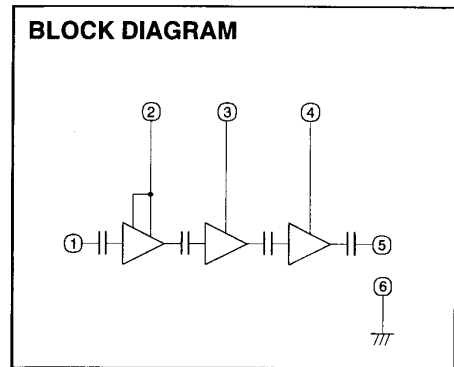
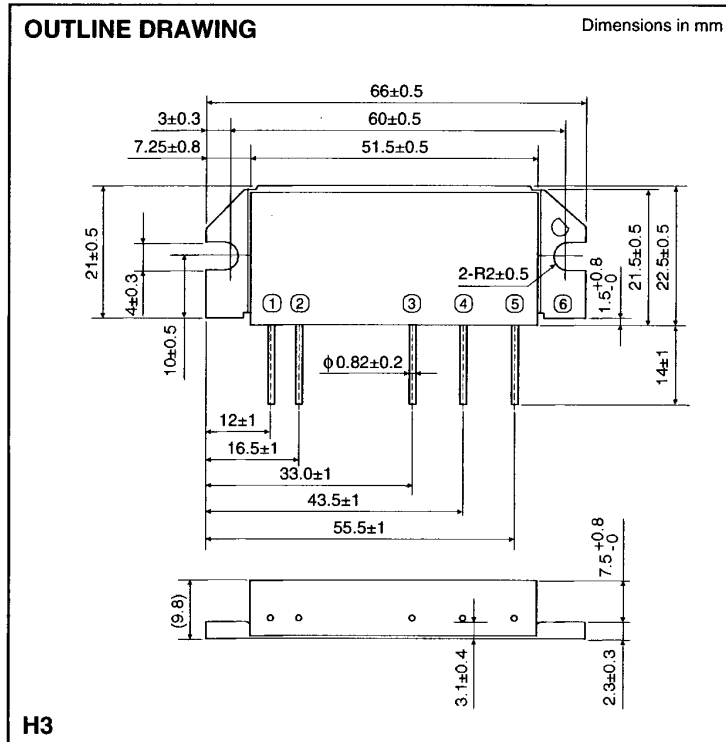


MITSUBISHI RF POWER MODULE  
M68703LA

400-430MHz, 12.5V, 50W, 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=50Ω             | 17          | V    |
| Icc                   | Total current              | ZG=ZL=50Ω             | 20          | A    |
| P <sub>in</sub> (max) | Input power                | ZG=ZL=50Ω, Vcc1≤12.5V | 600         | mW   |
| P <sub>o</sub> (max)  | Output power               | ZG=ZL=50Ω, Vcc1≤12.5V | 70          | W    |
| T <sub>c</sub> (OP)   | Operation case temperature | ZG=ZL=50Ω, Vcc1≤12.5V | -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     |   | 400                       | 430 | MHz  |
| P <sub>o</sub>  | Output power        |   | 50                        |     | W    |
| η <sub>T</sub>  | Total efficiency    |   | 35                        |     | %    |
| 2fo             | 2nd. harmonic       | Vcc=12.5V, P <sub>in</sub> =300mW, ZG=ZL=50Ω  |                           | -30 | dBc  |
| 3fo             | 3rd. harmonic       |   |                           | -30 | dBc  |
| ρ <sub>in</sub> | Input VSWR          |   |                           | 3   | -    |
| -               | Load VSWR tolerance | Vcc=15.2V, P <sub>o</sub> =50W (P <sub>in</sub> :controlled)<br>ZG=50Ω, Load VSWR=8:1 (All phase) | No degradation or destroy |     | -    |

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