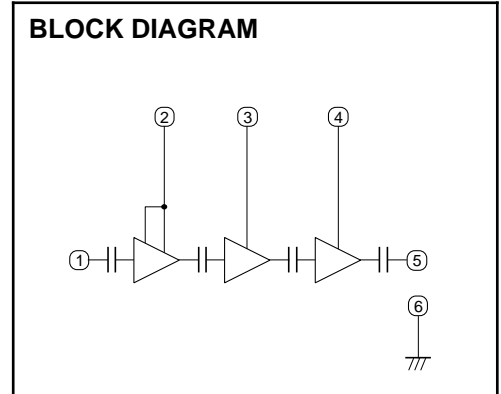
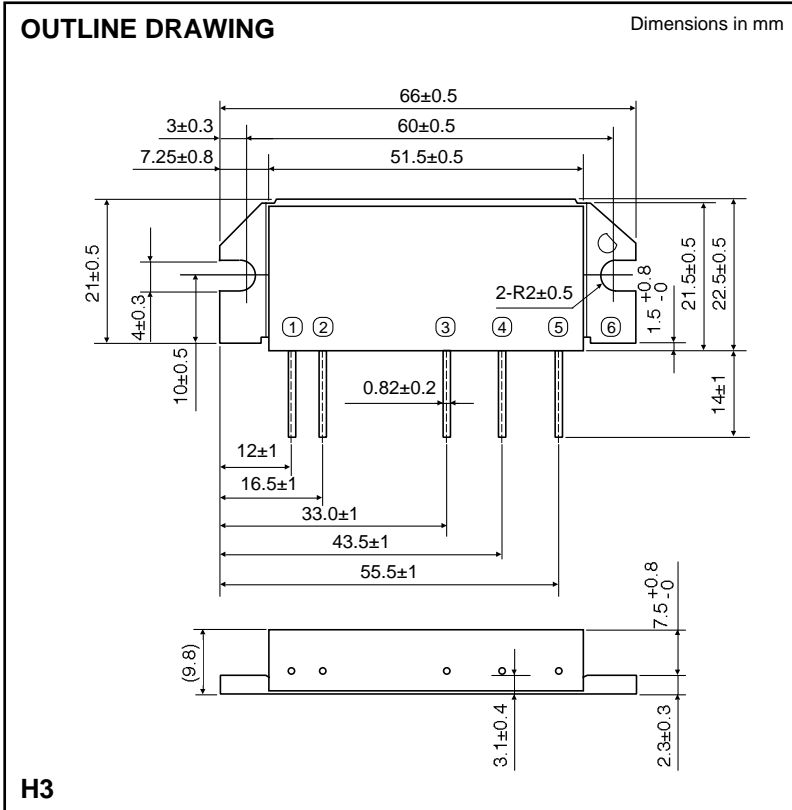


MITSUBISHI RF POWER MODULE  
**M68703HA**

440-470MHz, 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** (T<sub>c</sub>=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>cc</sub>	Supply voltage	Z <sub>G</sub> =Z <sub>L</sub> =50	17	V
I <sub>cc</sub>	Total current	Z <sub>G</sub> =Z <sub>L</sub> =50	20	A
P <sub>in (max)</sub>	Input power	Z <sub>G</sub> =Z <sub>L</sub> =50 , V <sub>cc1</sub> 12.5V	600	mW
P <sub>o (max)</sub>	Output power	Z <sub>G</sub> =Z <sub>L</sub> =50 , V <sub>cc1</sub> 12.5V	70	W
T <sub>c (OP)</sub>	Operation case temperature	Z <sub>G</sub> =Z <sub>L</sub> =50 , V <sub>cc1</sub> 12.5V	-30 to +110	°C
T <sub>stg</sub>	Storage temperature		-40 to +110	°C

Note. Above parameters are guaranteed independently.

**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub>=25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V <sub>cc</sub> =12.5V, P <sub>in</sub> =400mW, Z <sub>G</sub> =Z <sub>L</sub> =50	440	470	MHz
P <sub>o</sub>	Output power		50		W
η	Total efficiency		35		%
2f <sub>o</sub>	2nd. harmonic			-30	dBc
3f <sub>o</sub>	3rd. harmonic			-30	dBc
in	Input VSWR			3	-
-	Load VSWR tolerance	V <sub>cc</sub> =15.2V, P <sub>o</sub> =50W (P <sub>in</sub> :controlled) Z <sub>G</sub> =50 , Load VSWR=8:1 (All phase)	No degradation or destroy		-

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