

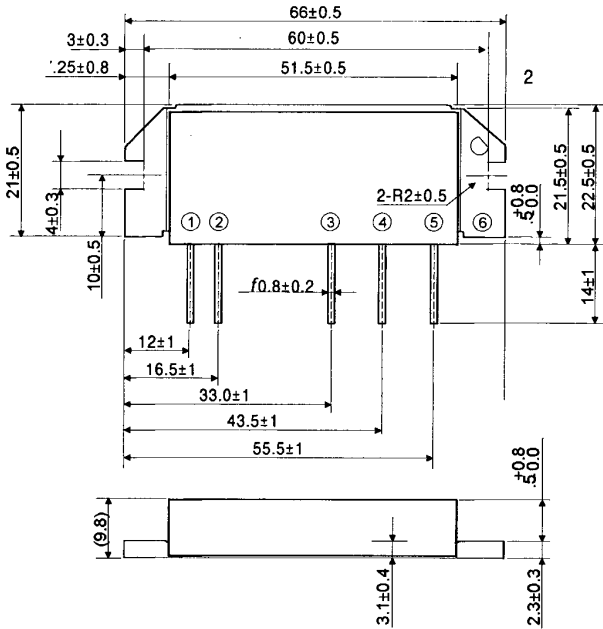
MITSUBISHI RF POWER MODULE

M68703SHA

470-490MHz, 12.5V, 50W, FM MOBILE RADIO

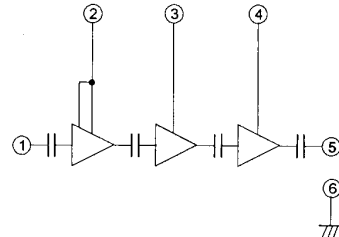
OUTLINE DRAWING

Dimensions in mm



H3

BLOCK DIAGRAM



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	ZG=ZL=50 ohms	17	V
Icc	Total current	ZG=ZL=50ohms	20	A
P <sub>in</sub> (max)	Input power	ZG=ZL=50ohms, Vcc1<12.5V	600	mW
P <sub>o</sub> (max)	Output power	ZG=ZL=50ohms, Vcc1<12.5V	70	W
T <sub>c</sub> (OP)	Operation case temperature	ZG=ZL=50ohms, Vcc1<12.5V	-30 to +110	°C
T <sub>sta</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		470	490	MHz
P <sub>o</sub>	Output power		50		W
η <sub>T</sub>	Total efficiency	Vcc=12.5V, P <sub>in</sub> =200mW, ZG=ZL=50ohms	33		%
2f <sub>o</sub>	2nd. harmonic			-30	dBc
3f <sub>o</sub>	3rd. harmonic	490		-30	dBc
r <sub>in</sub>	Input VSWR			3	-
-	Load VSWR tolerance	Vcc=15.2V, P <sub>o</sub> =50W (P <sub>in</sub> :Controlled), ZG=50ohms, Load VSWR=20:1 (All phase)	No degradation or destroy		-

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