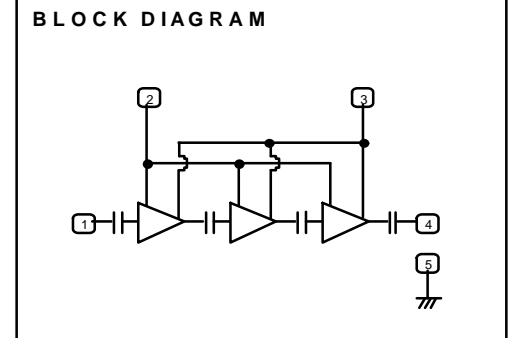
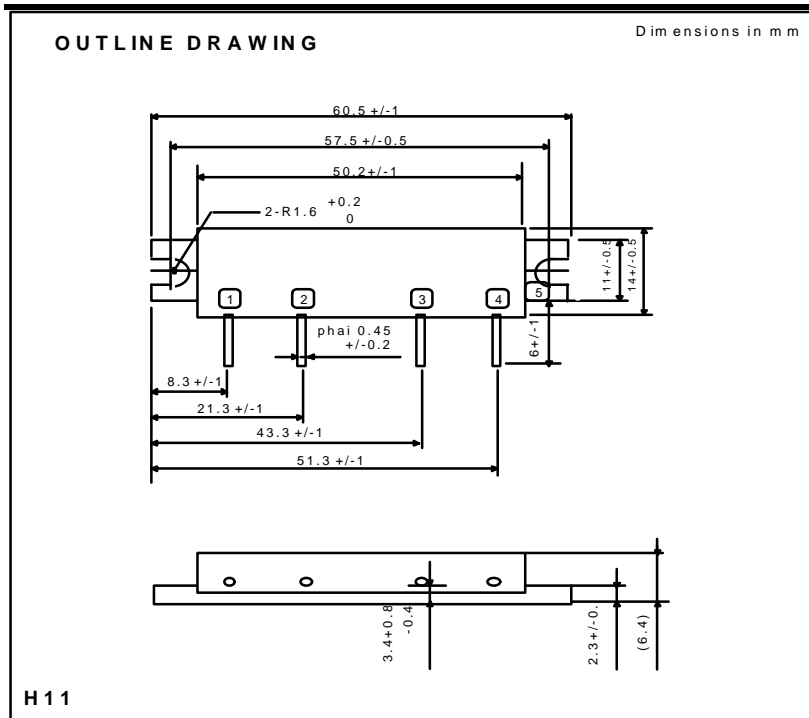


ATTENTION  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
SENSITIVE  
DEVICES

MITSUBISHI RF POWER MODULE

M68701H

Silicon MOS FET Power Amplifier, 890-960MHz 6W FM /Digital Mobile



PIN:  
 ① P<sub>in</sub> : RF INPUT  
 ② V<sub>GG</sub> : GATE BIAS SUPPLY  
 ③ V<sub>DD</sub> : DRAIN BIAS SUPPLY  
 ④ P<sub>o</sub> : RF OUTPUT  
 ⑤ GND : FIN

MAXIMUM RATINGS (T<sub>c</sub>=25deg C UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	CONDITIONS	RATINGS	UNIT
V <sub>DD</sub>	SUPPLY VOLTAGE	V <sub>GG</sub> <5V, Z <sub>G</sub> =Z <sub>L</sub> =50 ohms	17	V
V <sub>GG</sub>	GATE BIAS VOLTAGE		5.5	V
P <sub>in</sub>	INPUT POWER	f=890-960MHz, Z <sub>G</sub> =Z <sub>L</sub> =50 ohms	10	mW
P <sub>o</sub>	OUTPUT POWER	f=890-960MHz, Z <sub>G</sub> =Z <sub>L</sub> =50 ohms	10	W
T <sub>c(OP)</sub>	OPERATION CASE TEMPERATURE	f=890-960MHz, Z <sub>G</sub> =Z <sub>L</sub> =50 ohms	-30 to +100	deg. C
T <sub>stg</sub>	STORAGE TEMPERATURE		-40 to +110	deg. C

Note: Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25deg. C, Z<sub>G</sub>=Z<sub>L</sub>=50 ohms UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS		UNIT
			MIN	MAX	
f	FREQUENCY RANGE		890	960	MHz
P <sub>o</sub>	OUTPUT POWER	V <sub>DD</sub> =12.5V, V <sub>GG</sub> =5V, P <sub>in</sub> =1mW	6		W
Efficiency	TOTAL EFFICIENCY	V <sub>DD</sub> =12.5V,	35		%
2f <sub>o</sub>	2nd HARMONIC	P <sub>out</sub> =6W (V <sub>GG</sub> adjust)		-30	dBc
V <sub>SWR in</sub>	INPUT VSWR	P <sub>in</sub> =1mW		4	-
-	LOAD VSWR TOLERANCE	V <sub>DD</sub> =15.2V, P <sub>in</sub> =1mW, P <sub>o</sub> =6W (V <sub>GG</sub> adjust) Z <sub>G</sub> =50 ohms, LOAD VSWR=20:1	No degradation or destroy		-

ABOVE PARAMETERS, RATINGS, LIMITS AND CONDITIONS ARE SUBJECT TO CHANGE .

Keep safety first in your circuit designs!

Mitsubishi Electric Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of non-flammable material or (iii) prevention against any malfunction or mishap.

