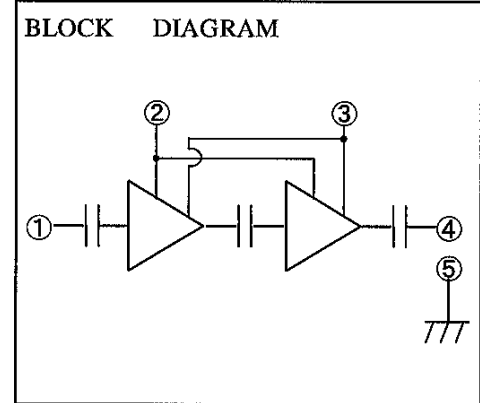
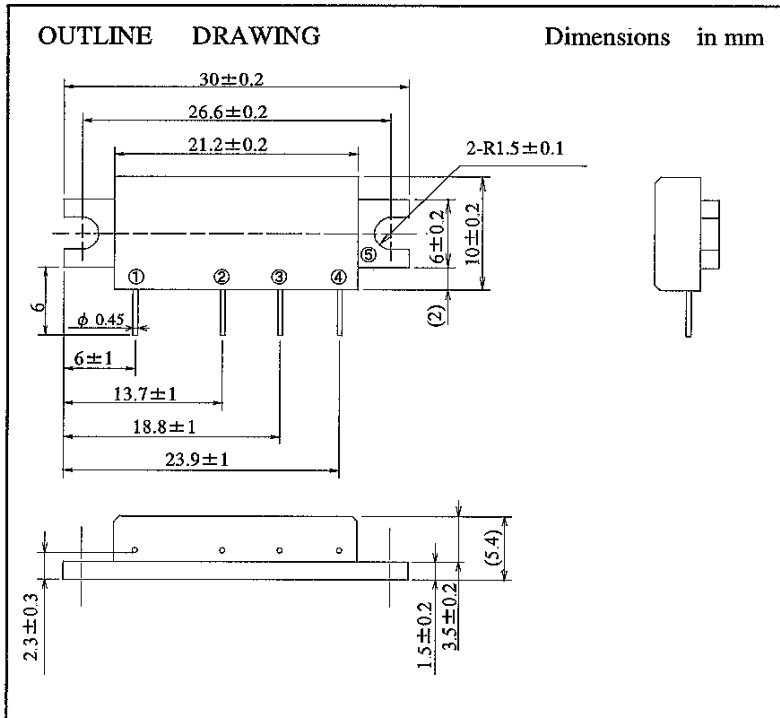


ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE
DEVICES

MITSUBISHI RF POWER MODULE

M68779H

Silicon MOS FET Power Amplifier, 240-270MHz 7.0W FM PORTABLE



- PIN:**
- ① Pin :RF INPUT
 - ② V_{GG} :GATE BIAS SUPPLY
 - ③ V_{DD} :DRAIN BIAS SUPPLY
 - ④ P_o :RF OUTPUT
 - ⑤ GND :FIN

MAXIMUM RATINGS (T_c=25°C UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	CONDITIONS	RATINGS	UNIT
V _{DD}	SUPPLY VOLTAGE	V _{GG} ≤ 3.5V, Z _g =Z _l =50 Ω	9.2	V
V _{GG}	GATE BIAS VOLTAGE		4	V
P _{in}	INPUT POWER	f=240-270MHz, Z _g =Z _l =50 Ω	50	mW
P _o	OUTPUT POWER	f=240-270MHz, Z _g =Z _l =50 Ω	10	W
T _{c(OP)}	OPERATION CASE TEMPERATURE	f=240-270MHz, Z _g =Z _l =50 Ω	-30 to +100	°C
T _{stg}	STORAGE TEMPERATURE		-40 to +110	°C

Note: Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS (T_c=25°C, Z_g=Z_l=50 Ω UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	CONDITIONS	LIMITS		UNIT
			MIN	MAX	
f	FREQUENCY RANGE		240	270	MHz
P _o	OUTPUT POWER	V _{DD} =7.2V, V _{GG} =3.5V, P _{in} =30mW	7.0		W
η _t	TOTAL EFFICIENCY	P _o =6.0W, (V _{GG} =adj.),	44		%
2f _o	2nd HARMONIC	P _{in} =30mW.		-25	dBc
ρ _{in}	INPUT VSWR	V _{DD} =7.2V		5	-
	Stability	Z _g =50 Ω, V _{DD} =6/7.2/9.2V, LOAD VSWR ≤ 4:1 P _{in} =20/30/50mW, P _o <8W	No parasitic oscillation		
	LOAD VSWR TOLERANCE	V _{DD} =9.2V, P _{in} =30mW, P _o =7.0W (V _{GG} ADJUST), ρ _L =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.

TYPICAL PERFORMANCE DATA

