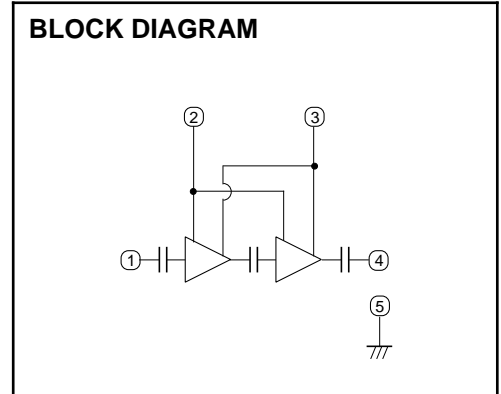
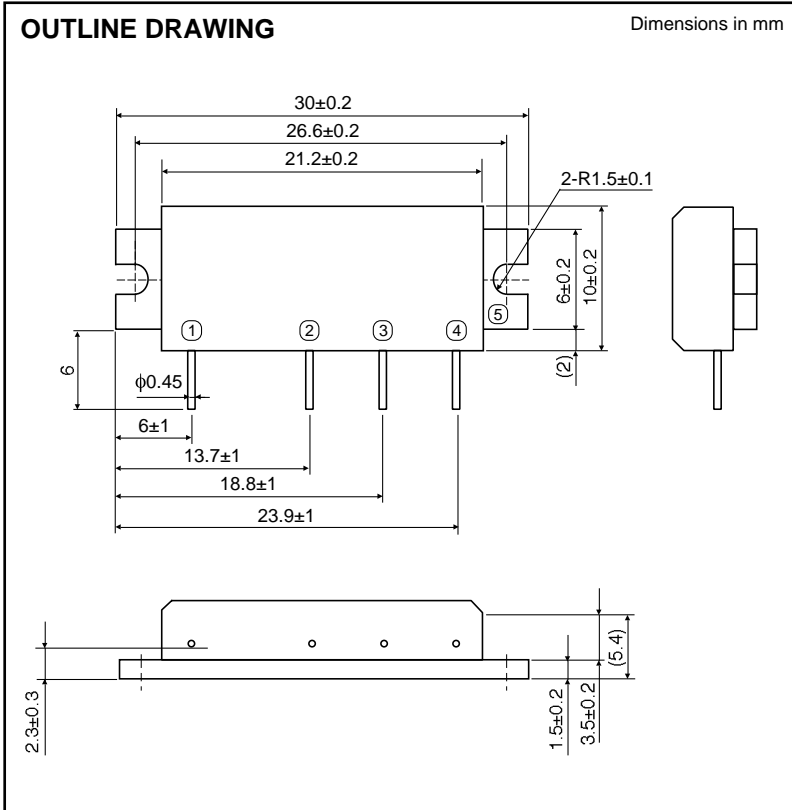


MITSUBISHI RF POWER MODULE  
**M68731N**

SILICON MOS FET POWER AMPLIFIER, 142-163MHz, 7W, FM PORTABLE RADIO



- PIN:  
 ① Pin : RF INPUT  
 ② VGG : GATE BIAS SUPPLY  
 ③ VDD : DRAIN BIAS SUPPLY  
 ④ PO : RF OUTPUT  
 ⑤ GND: FIN

**ABSOLUTE MAXIMUM RATINGS** (Tc=25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
VDD	Supply voltage	VGG 3.5V, ZG=ZL=50	9.2	V
VGG	Gate bias voltage		4	V
Pin	Input power	f=142-163MHz, ZG=ZL=50	70	mW
Po	Output power	f=142-163MHz, ZG=ZL=50	10	W
Tc (OP)	Operation case temperature	f=142-163MHz, ZG=ZL=50	-30 to +100	°C
Tstg	Storage temperature		-40 to +110	°C

Note. Above parameters are guaranteed independently.

**ELECTRICAL CHARACTERISTICS** (Tc=25°C, ZG=ZL=50 unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		142	163	MHz
Po	Output power		7		W
η	Total efficiency	VDD=7.2V, VGG=3.5V, Pin=50W	45		%
2fo	2nd. harmonic			-20	dBc
in	Input VSWR			4	-
-	Stability	ZG=50, VDD=4-9.2V, Load VSWR<4:1	No parasitic oscillation		-
-	Load VSWR tolerance	VDD=9.2V, Pin=50mW, Po=7W (VGG adjust), ZL=20:1	No degradation or destroy		-

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

**SILICON MOS FET POWER AMPLIFIER, 142-163MHz, 7W, FM PORTABLE RADIO**

**TYPICAL PERFORMANCE DATA**

