

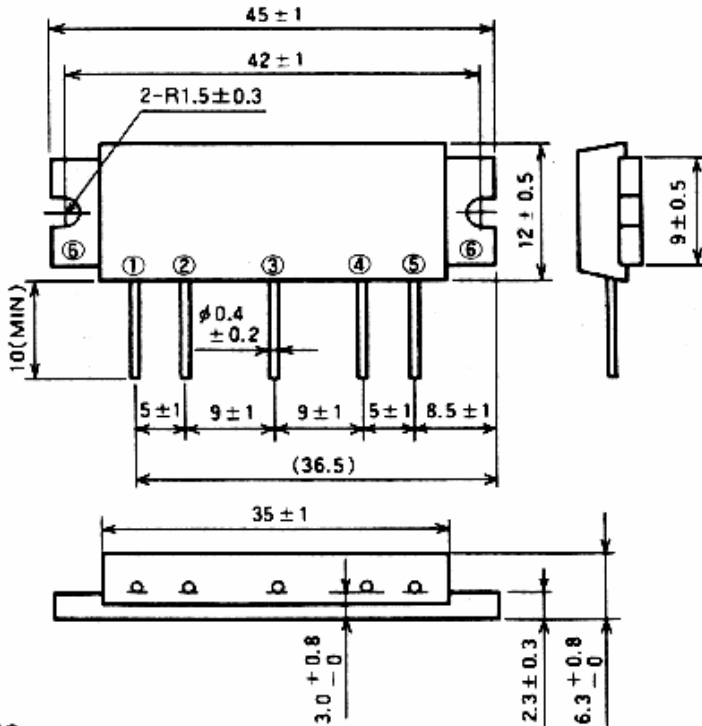
MITSUBISHI RF POWER MODULE

M57787

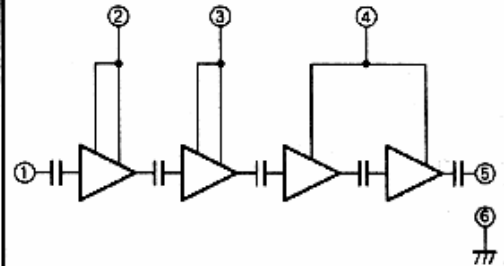
1240-1300MHz, 7.2V, 1.5W, FM PORTABLE RADIO

OUTLINE DRAWING

Dimensions in mm



BLOCK DIAGRAM



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

H13

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc1, 2}	Supply voltage	P _o ≤ 3W, V _{cc3} ≤ 9V	9	V
V _{cc3}		P _o ≤ 3W, V _{cc1, 2} ≤ 7.2V	16	V
I _{cc}	Total current		1.5	A
P _{in(max)}	Input power	Z _G = Z _L = 50Ω, P _o ≤ 3W, V _{cc1, 2} ≤ 7.2V	10	mW
P _{o(max)}	Output power	Z _G = Z _L = 50Ω, V _{cc1, 2} ≤ 7.2V	3	W
T _{c(OP)}	Operation case temperature	Z _G = Z _L = 50Ω, V _{cc1, 2} ≤ 7.2V	- 20 to 100	°C
T _{stg}	Storage temperature	Z _G = Z _L = 50Ω, V _{cc1, 2} ≤ 7.2V	- 40 to 110	°C

Note. Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS (T_c = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V _{cc1} = V _{cc2} = V _{cc3} = 7.2V P _{in} = 7mW Z _G = Z _L = 50Ω	1.24	1.3	GHz
P _o	Output power		1.5		W
η _T	Total efficiency		28		%
2f _o	2nd. harmonic			- 30	dBc
ρ _{in}	Input VSWR			3.5	-
-	Load VSWR tolerance	V _{cc2} = 9V, V _{cc3} = 15V; P _{in} = 7mW P _o = 2W (V _{cc1} : controlled) Load VSWR = 10 : 1 (All phase), Z _G = 50Ω	No degradation or destroy		-

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