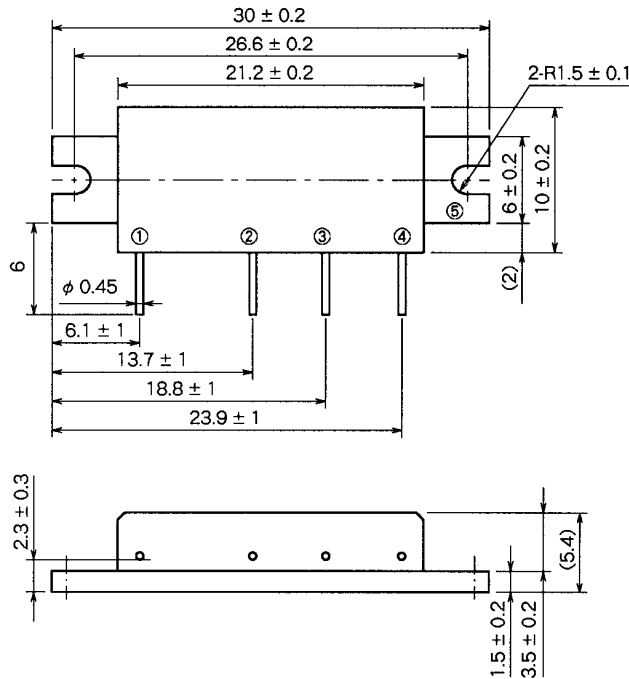


M68710UH

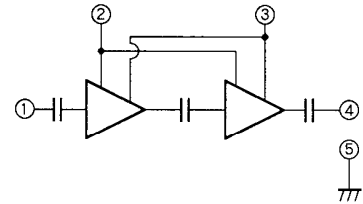
470-520MHz, 6V, 2W FM PORTABLE RADIO

OUTLINE DRAWING

Dimensions in mm



BLOCK DIAGRAM



PIN :

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

ABSOLUTE 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 = 50Ω	9	V
V _{GG}	Gate bias voltage		4	V
P _{in}	Input power	f=470 to 520MHz, Z _G =Z _L =50Ω	30	mW
P _o	Output power	f=470 to 520MHz, V _{DD} ≤9V, Z _G =Z _L =50Ω	3	W
T _{C(OP)}	Operation case temperature	f=470 to 520MHz, V _{DD} ≤9V, Z _G =Z _L =50Ω	- 30 to 110	°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 = 50Ω, unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		470	520	MHz
P _o	Output power	V _{DD} = 6V V _{GG} = 3.5V P _{in} = 20mW	2		W
η _T	Total efficiency		40		%
2f _o	2nd. harmonic			- 25	dBc
ρ _{in}	Input VSWR			4	-
-	Stability	Z _G = 50Ω, V _{DD} = 4 to 8V, Load VSWR < 4 : 1	No parasitic oscillation		-
-	Load VSWR tolerance	V _{DD} = 9V, P _{in} = 20mW, P _o = 2W(V _{GG} Adjust), Z _L = 20 : 1	No degradation or destroy		-

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