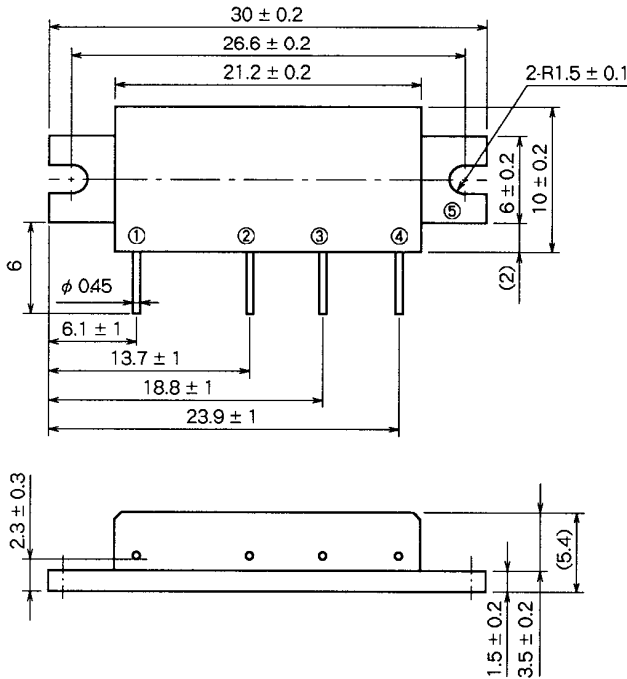


M67798LA

144-148MHz, 9.6V, 8W FM PORTABLE RADIO

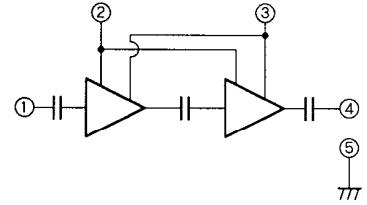
OUTLINE DRAWING

Dimensions in mm



H46

BLOCK DIAGRAM



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

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	16	V
V _{GG}	Gate bias voltage		4	V
P _{in}	Input power	f = 144 to 148MHz, Z _G = Z _L = 50Ω	30	mW
P _o	Output power	f = 144 to 148MHz, Z _G = Z _L = 50Ω	10	W
T _{C(OP)}	Operation case temperature	f = 144 to 148MHz, Z _G = Z _L = 50Ω	- 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 = 50Ω, unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		144	148	MHz
P _o	Output power		8	—	W
η _T	Total efficiency	V _{DD} = 9.6V	53	—	%
2f _o	2nd. harmonic	V _{GG} = 3.5V	—	- 20	dBc
3f _o	3rd. harmonic	P _{in} = 20mW	—	- 30	dBc
ρ _{in}	Input VSWR		—	3	—
—	Stability	Z _G = 50Ω, V _{DD} = 4.8 to 13.2V, Load VSWR < 4 : 1	No parasitic oscillation		—
—	Load VSWR tolerance	V _{DD} = 13.2V, P _{in} = 20mW, P _o = 8W(V _{GG} Adjust), Z _L = 20 : 1	No degradation or destroy		—

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

TYPICAL PERFORMANCE DATA

