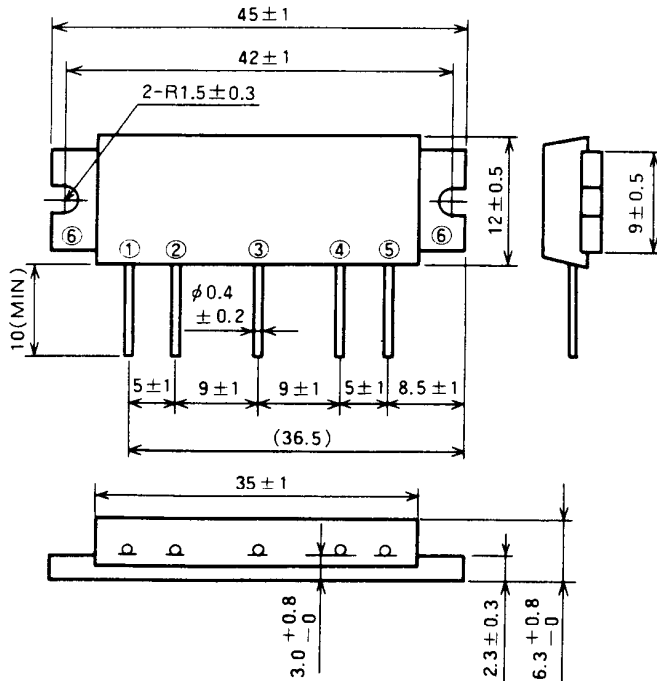


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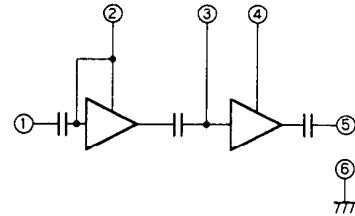
68-81MHz, 12.5V, 7W, FM PORTABLE RADIO

OUTLINE DRAWING

Dimensions in mm



BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② Vcc1 : 1st. DC SUPPLY
- ③ VBB : BASE BIAS SUPPLY
- ④ Vcc2 : 2nd. DC SUPPLY
- ⑤ Po : RF OUTPUT
- ⑥ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		15	V
V _{BB}	Base bias		5.5	V
I _{cc}	Total current		4	A
P _{in(max)}	Input power	Z _G = Z _L = 50 Ω, V _{cc1} ≤ 12.5V	40	mW
P _{O(max)}	Output power	Z _G = Z _L = 50 Ω	10	W
T _{c(OP)}	Operation case temperature		- 30 to 110	°C
T _{stg}	Storage temperature		- 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		68	81	MHz
P _o	Output power	P _{in} = 30mW	7		W
η _T	Total efficiency	V _{BB} = 5V	38		%
2f _o	2nd. harmonic	V _{cc} = 12.5V		- 18	dBc
3f _o	3rd. harmonic	Z _G = Z _L = 50 Ω		- 25	dBc
ρ _{in}	Input VSWR			4.0	-
-	Load VSWR tolerance	V _{cc} = 13.2V, V _{BB} = 5V P _o = 7W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z _G = 50 Ω	No degradation or destroy		-

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

TYPICAL PERFORMANCE DATA

