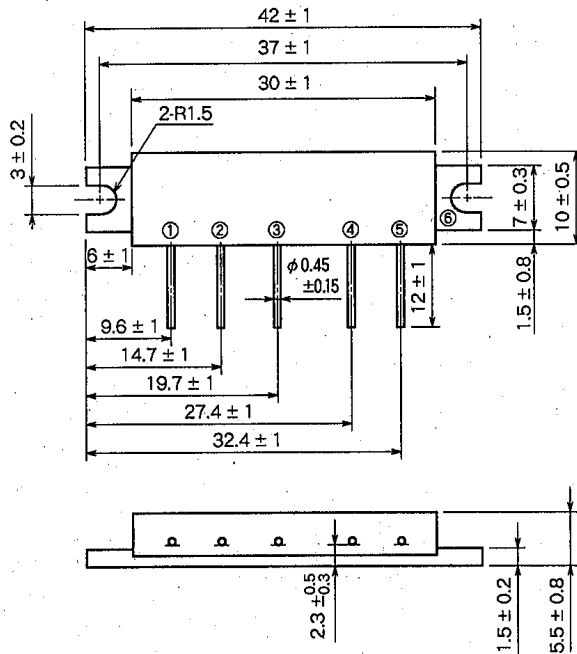


M67796A

1240-1300MHz, 7.2V, 1.4W, FM PORTABLE RADIO

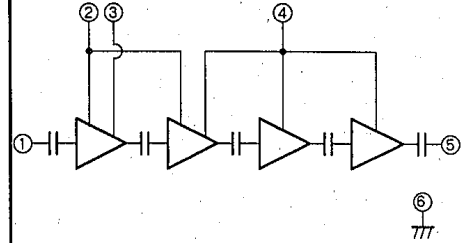
OUTLINE DRAWING

Dimensions in mm



H27

BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② V_{BB} : BASE BIAS SUPPLY
- ③ V_{CC1} : 1st. DC SUPPLY
- ④ V_{CC2} : 2nd. DC SUPPLY
- ⑤ P_o : RF OUTPUT
- ⑥ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{CC1}	1st. DC supply		6	V
V _{CC2}	2nd. DC supply		16	V
V _{BB}	Base bias		4.2	V
I _{CC}	Total current		3	A
P _{in(max)}	Input power	V _{CC1} ≤ 5V, V _{BB} = 4V, Z _G = Z _L = 50Ω	30	mW
P _{o(max)}	Output power	Z _G = Z _L = 50Ω	2.5	W
T _{c(OP)}	Operation case temperature		- 30 to 100	°C
T _{stg}	Storage temperature		- 40 to 100	°C

Note. Above parameters are guaranteed independently.

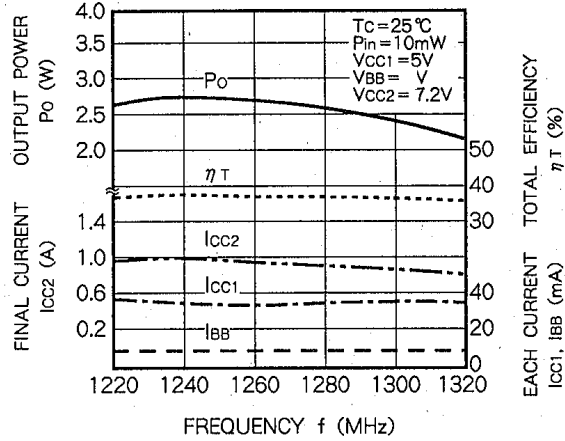
ELECTRICAL CHARACTERISTICS (T_c = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V _{CC1} = 5V	1.24	1.3	GHz
P _o	Output power	V _{BB} = 4V	1.4		W
η _T	Total efficiency	V _{CC2} = 7.2V	25		%
2f _o	2nd. harmonic	P _{in} = 10mW		- 28	dBc
ρ _{in}	Input VSWR	Z _G = Z _L = 50Ω		3.5	-
-	Load VSWR tolerance	V _{BB} = 4V, V _{CC2} = 15V, P _{in} = 10mW P _o = 1.4W(V _{CC1} : controlled), Load VSWR=10:1 (All phase), 5sec. Z _G = 50Ω	No degradation or destroy		-

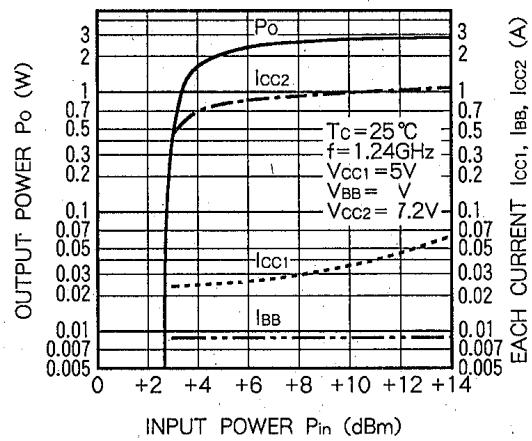
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

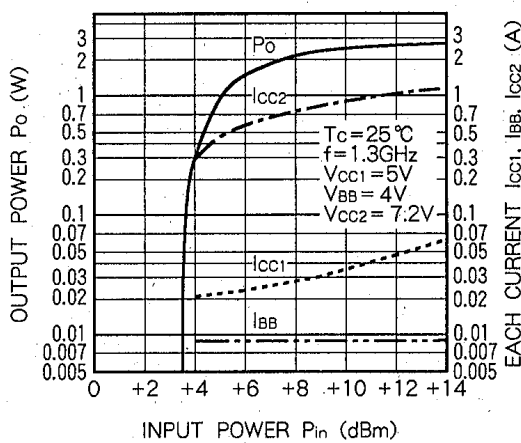
OUTPUT POWER, FINAL CURRENT, EACH CURRENT, TOTAL EFFICIENCY VS. FREQUENCY CHARACTERISTICS



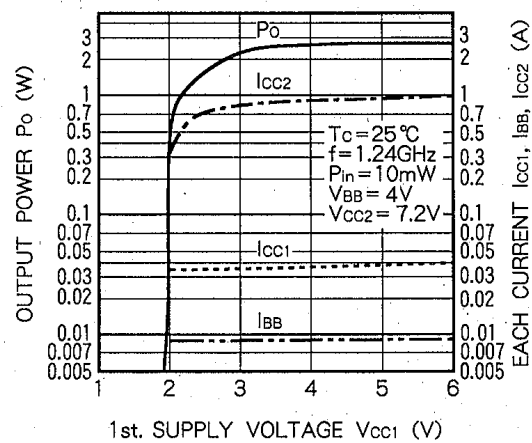
OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. 1st. SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. 1st. SUPPLY VOLTAGE CHARACTERISTICS

