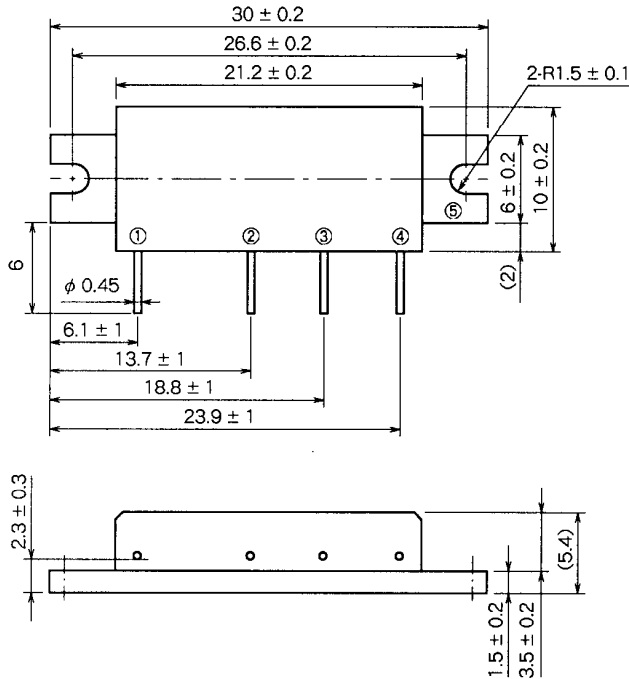


M67799MA

430-450MHz, 9.6V, 7.5W, FM PORTABLE RADIO

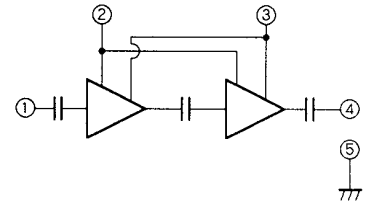
OUTLINE DRAWING

Dimensions in mm



H46

BLOCK DIAGRAM



PIN :

- ①Pin : RF INPUT
- ②V_{GG} : GATE BIAS SUPPLY
- ③V_{DD} : DRAIN BIAS SUPPLY
- ④Po : RF OUTPUT
- ⑤GND : 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 = 430 to 450MHz, Z _G = Z _L = 50Ω	30	mW
P _o	Output power	f = 430 to 450MHz, Z _G = Z _L = 50Ω	10	W
T _{c(OP)}	Operation case temperature	f = 430 to 450MHz, Z _G = Z _L = 50Ω	- 30 to 100	°C
T _{stg}	Storage temperature		- 40 to 110	°C

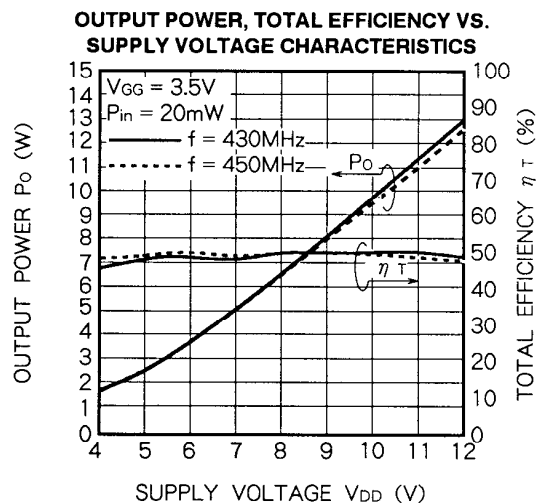
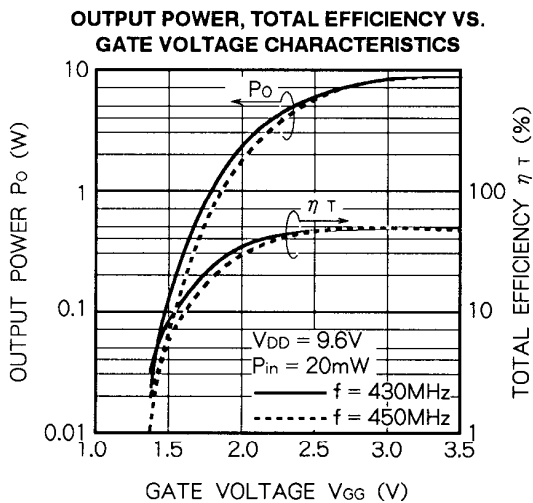
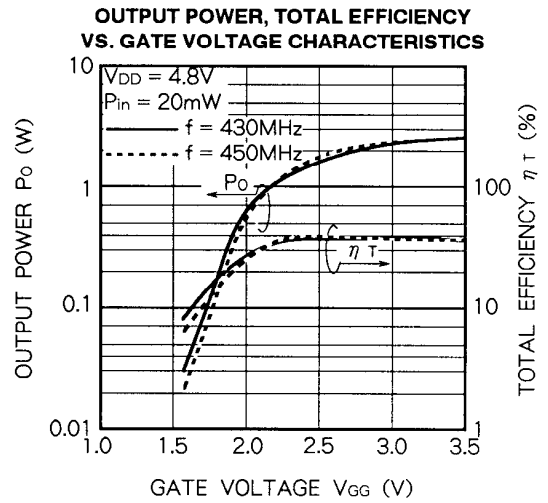
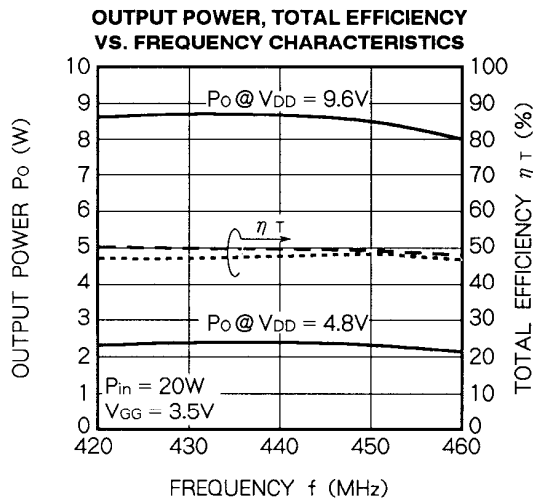
Note. Above parameters are guaranteed independently.

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		430	450	MHz
P _o	Output power		7.5		W
η _T	Total efficiency	V _{DD} = 9.6V V _{GG} = 3.5V P _{in} = 20mW	43		%
2f _o	2nd. harmonic			- 25	dBc
3f _o	3rd. harmonic			- 30	dBc
ρ _{in}	Input VSWR			4	-
-	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 = 7.5W(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



TYPICAL PERFORMANCE DATA

