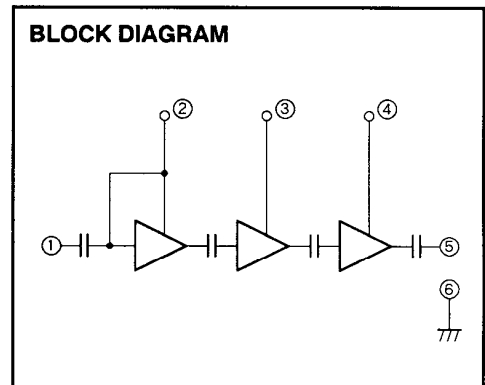
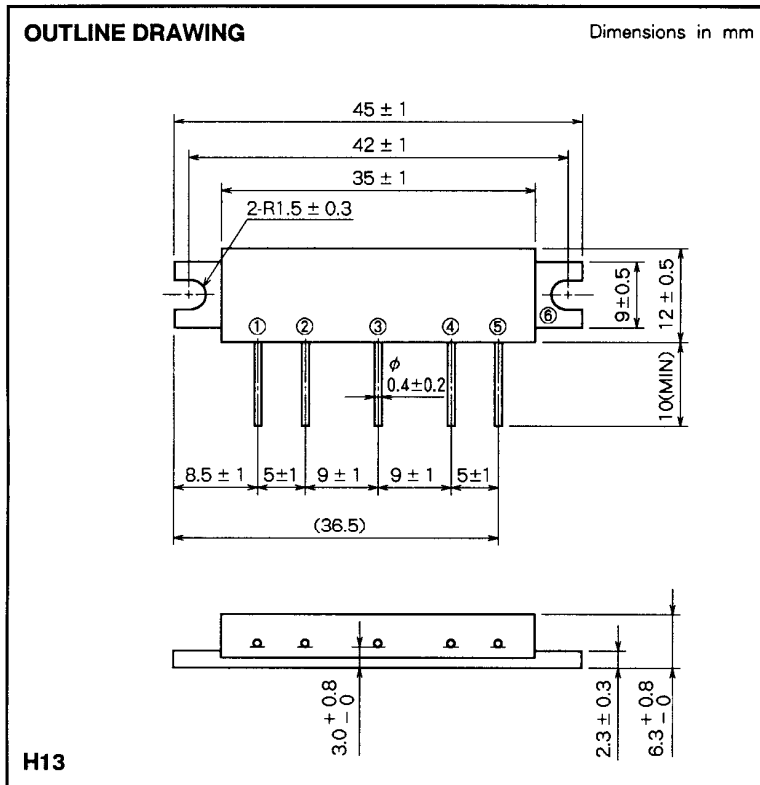


# M67706

806-870MHz, 7.5V, 4W, FM PORTABLE RADIO



- PIN :
- ① Pin : RF INPUT
  - ② Vcc1 : 1st. DC SUPPLY
  - ③ Vcc2 : 2nd. DC SUPPLY
  - ④ Vcc3 : 3rd. DC SUPPLY
  - ⑤ Po : RF OUTPUT
  - ⑥ GND : FIN

**ABSOLUTE MAXIMUM RATINGS** (T<sub>c</sub> = 25 °C, unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>cc</sub>	Supply voltage		10	V
I <sub>cc</sub>	Total current	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	2.5	A
P <sub>in(max)</sub>	Input power	f=806-870MHz, V <sub>cc1</sub> ≤ 7.2V, Z <sub>G</sub> =Z <sub>L</sub> =50Ω	150	mW
P <sub>O(max)</sub>	Output power	f=806-870MHz, V <sub>cc1</sub> ≤ 7.2V, Z <sub>G</sub> =Z <sub>L</sub> =50Ω	5	W
T <sub>C(OP)</sub>	Operation case temperature	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	- 30 to 110	°C
T <sub>stg</sub>	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

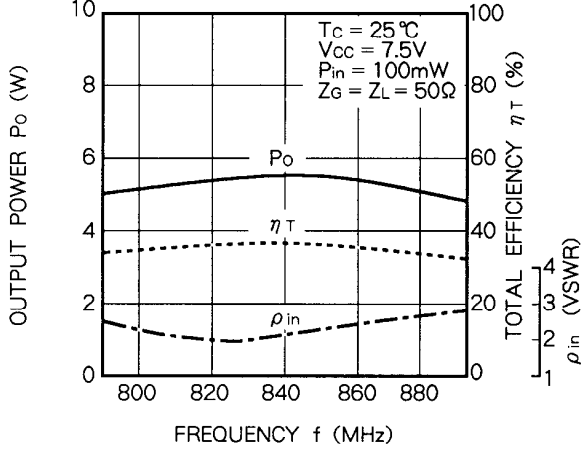
**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub> = 25 °C, unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V <sub>cc</sub> = 7.5V, P <sub>in</sub> = 100mW, Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	806	870	MHz
P <sub>o</sub>	Output power		4		W
η <sub>T</sub>	Total efficiency		30		%
2f <sub>o</sub>	2nd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			4	-
-	Load VSWR tolerance	f=806-825MHz, f=851-870MHz, V <sub>cc</sub> =9V, P <sub>o</sub> = 4W(P <sub>in</sub> :controlled), Z <sub>G</sub> = 50Ω Load VSWR=20:1(All phase), 5sec.	No degradation or destroy		-

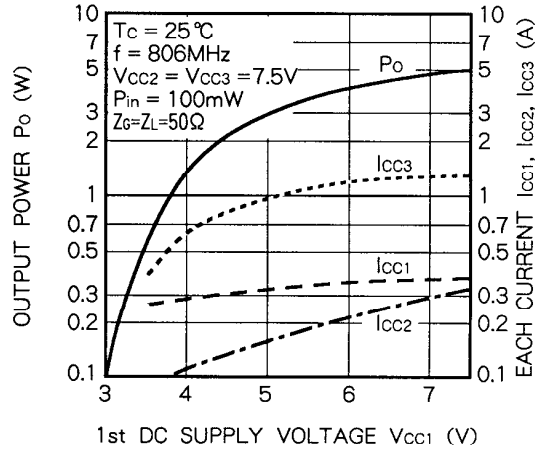
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

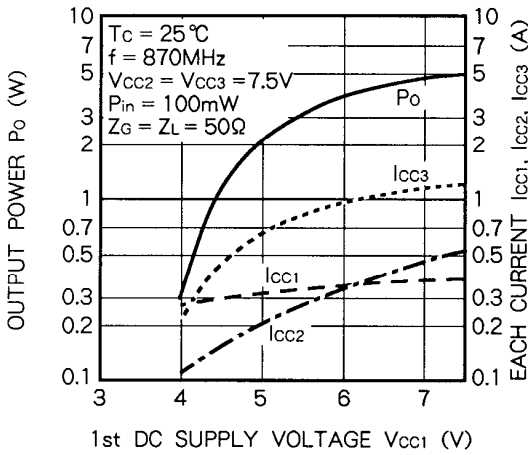
OUTPUT POWER, TOTAL EFFICIENCY,  $\rho_{in}$  VS. FREQUENCY CHARACTERISTICS



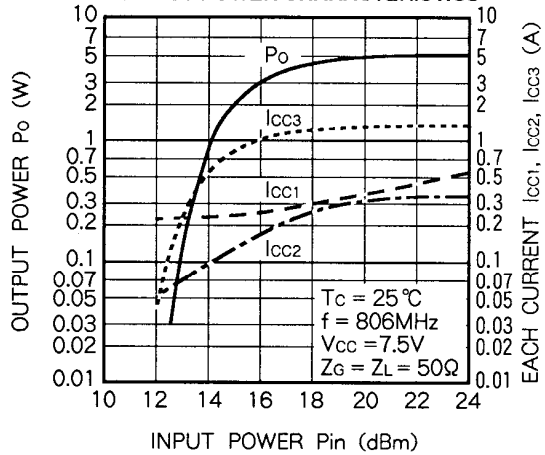
OUTPUT POWER, EACH CURRENT VS. 1st DC SUPPLY VOLTAGE CHARACTERISTICS



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



OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS

