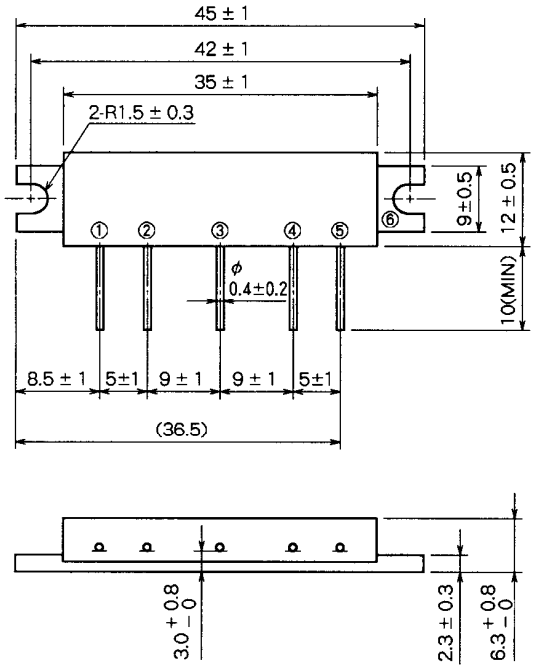
M67706

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

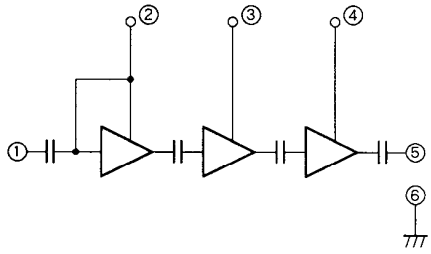
OUTLINE DRAWING

Dimensions in mm



H13

BLOCK DIAGRAM



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 (Tc = 25℃, unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		10	V
Icc	Total current	ZG = ZL = 50 Ω	2.5	A
Pin(max)	Input power	f=806-870MHz, Vcc1 ≦ 7. 2V, ZG=ZL=50 Ω	150	mW
Po(max)	Output power	f=806-870MHz, Vcc1 ≦ 7. 2V, ZG=ZL=50 Ω	5	W
Tc(OP)	Operation case temperature	ZG = ZL = 50 Ω	− 30 to 110	℃
Tstg	Storage temperature		− 40 to 110	℃

Note. Above parameters are guaranteed independently.

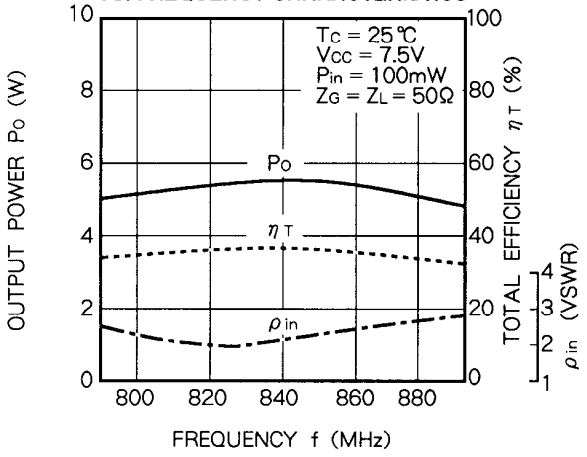
ELECTRICAL CHARACTERISTICS (Tc = 25℃, unless otherwise noted)

Symbol	Parameter	Test conditions	Limits Min	Limits Max	Unit
f	Frequency range	Vcc = 7.5V, Pin = 100mW, ZG = ZL = 50 Ω	806	870	MHz
Po	Output power		4		W
η_T	Total efficiency		30		%
2fo	2nd. harmonic			− 30	dBc
ρ_{in}	Input VSWR			4	−
−	Load VSWR tolerance	f=806-825MHz, f=851-870MHz, Vcc=9V, Po = 4W(Pin:controlled), ZG = 50Ω Load VSWR=20:1(All phase), 5sec.	No degradation or destroy		−

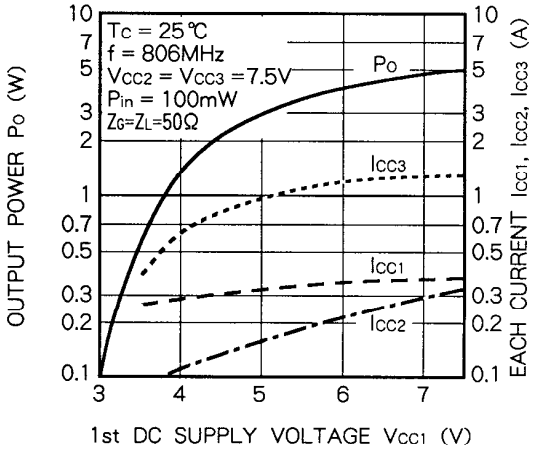
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

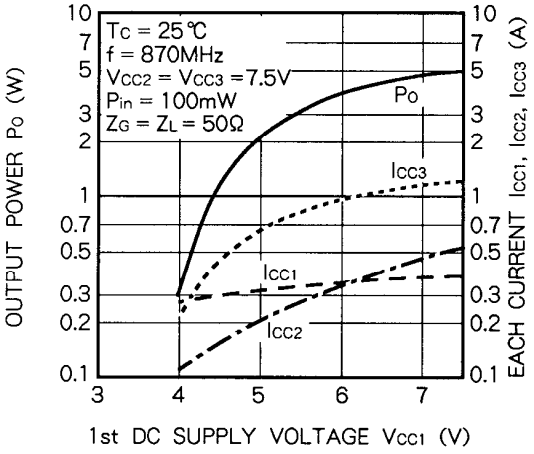
OUTPUT POWER, TOTAL EFFICIENCY, ρin VS. FREQUENCY CHARACTERISTICS



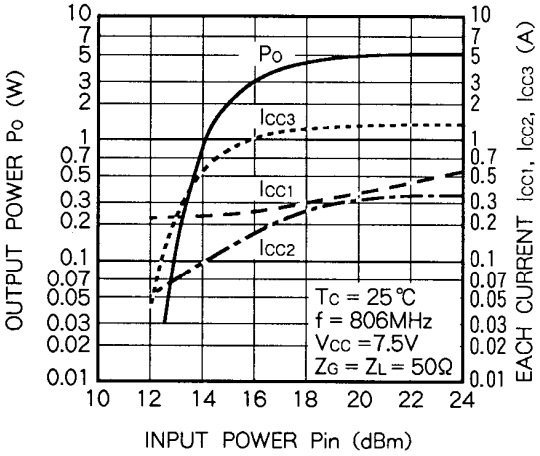
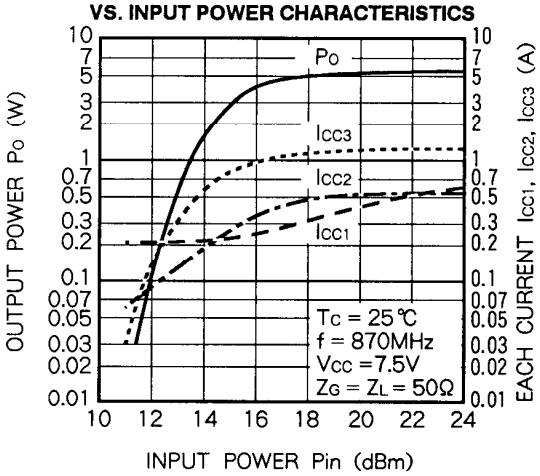
OUTPUT POWER, EACH CURRENT VS. 1st DC SUPPLY VOLTAGE CHARACTERISTICS



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