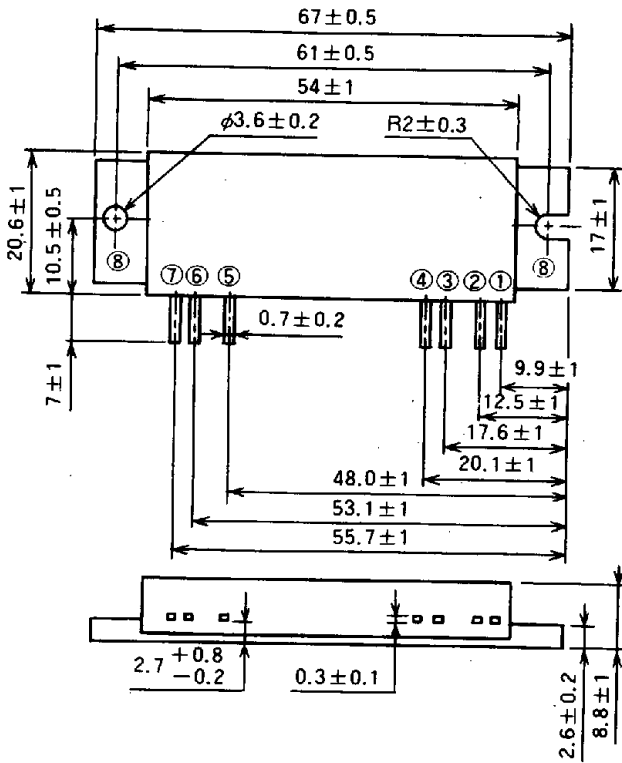


M67729H2

450-460MHz, 12.5V, 20W, FM MOBILE RADIO

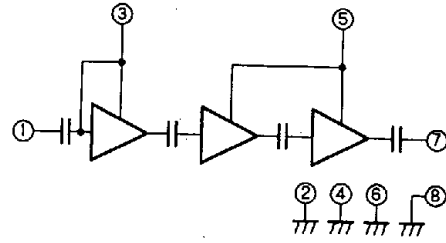
OUTLINE DRAWING

Dimensions in mm



H18

BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② GND
- ③ Vcc1 : 1st. DC SUPPLY
- ④ GND
- ⑤ Vcc2 : 2nd. DC SUPPLY
- ⑥ GND
- ⑦ Po : RF OUTPUT
- ⑧ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		16	V
I _{cc}	Total current		6	A
P _{in(max)}	Input power	Z _G = Z _L = 50 Ω, V _{cc1} ≤ 12.5V	0.3	W
P _{o(max)}	Output power	Z _G = Z _L = 50 Ω	30	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.

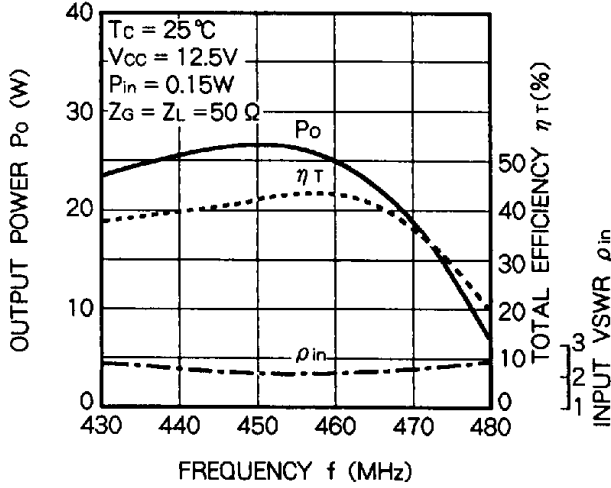
ELECTRICAL CHARACTERISTICS (T_c = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P _{in} = 0.15W V _{cc} = 12.5V Z _G = Z _L = 50 Ω	450	460	MHz
P _o	Output power		20		W
η _T	Total efficiency		35		%
2f _o	2nd. harmonic			- 40	dBc
3f _o	3rd. harmonic			- 40	dBc
ρ _{in}	Input VSWR			2	-
-	Load VSWR tolerance	V _{cc} = 15.5V, P _o = 25W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z _G = 50 Ω	No degradation or destroy		-

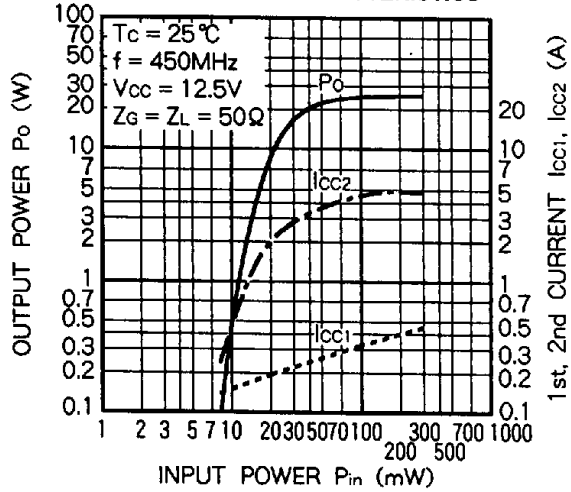
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

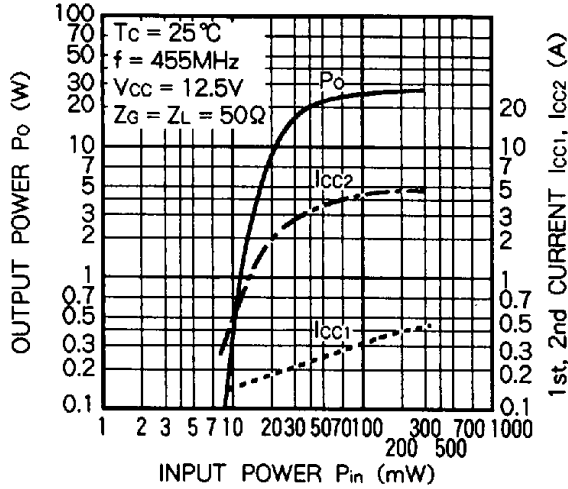
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY CHARACTERISTICS



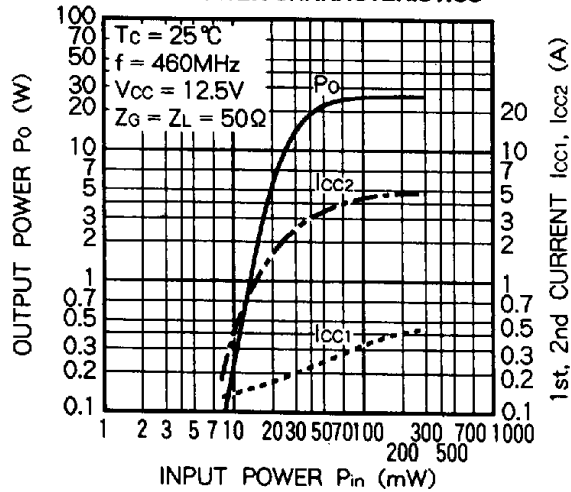
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



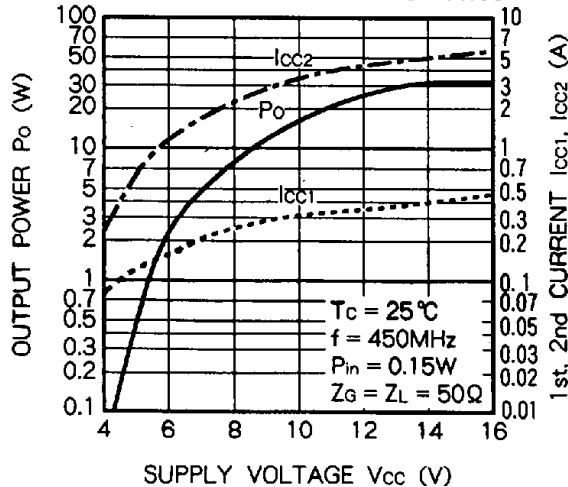
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



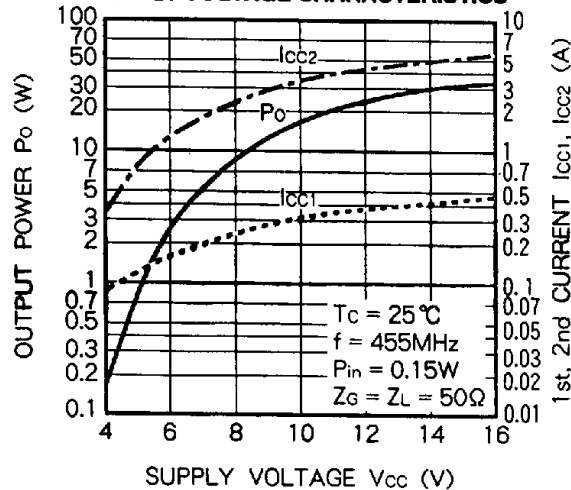
OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS



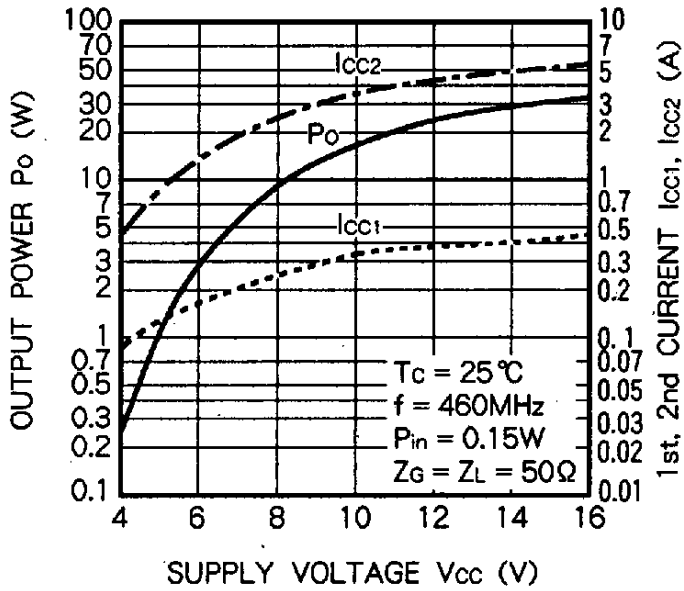
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



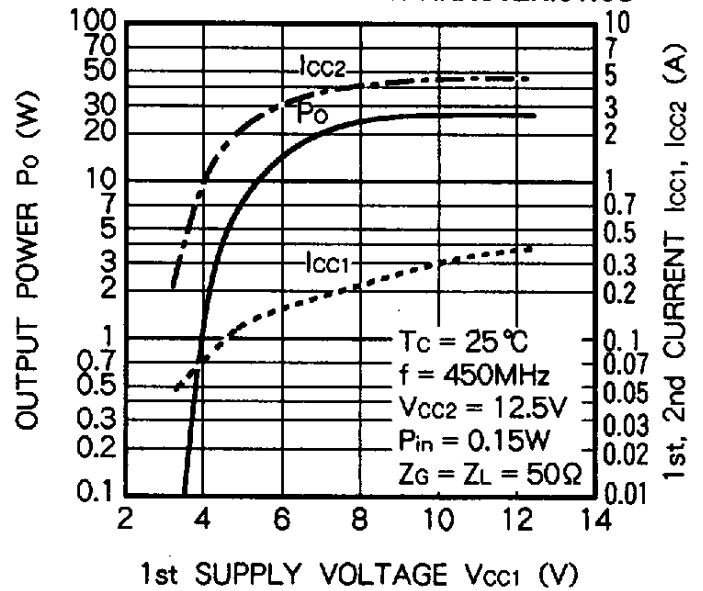
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



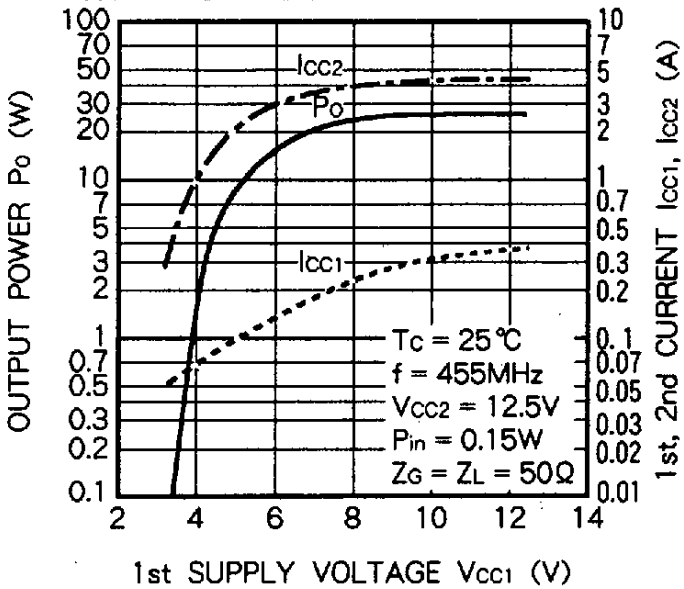
OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS

