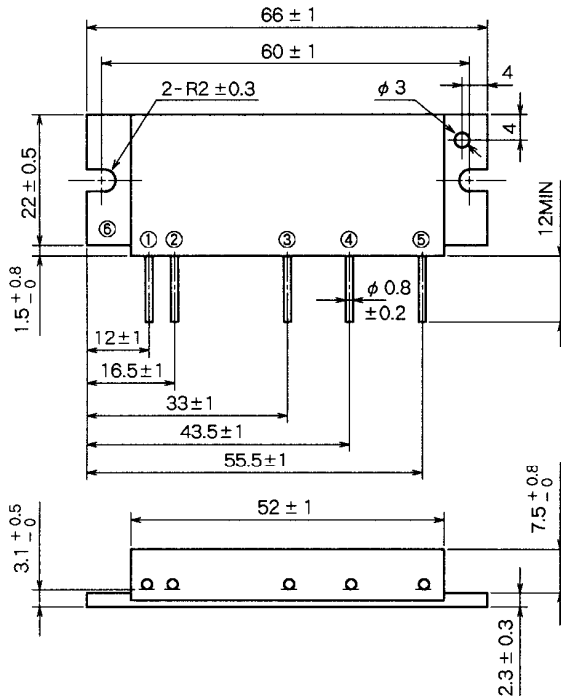


M57729H

450-470MHz, 12.5V, 30W, FM MOBILE RADIO

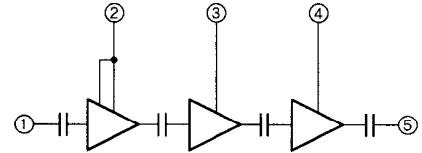
OUTLINE DRAWING

Dimensions in mm



H3

BLOCK DIAGRAM



PIN :

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

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		17	V
I _{cc}	Total current		10	A
P _{in(max)}	Input power	Z _G = Z _L = 50 Ω	0.4	W
P _{o(max)}	Output power	Z _G = Z _L = 50 Ω	40	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.

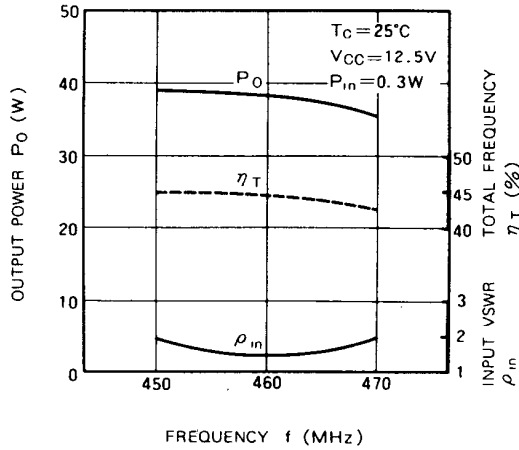
ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P _{in} = 0.3W V _{cc} = 12.5V Z _G = Z _L = 50 Ω	450	470	MHz
P _o	Output power		30		W
η _T	Total efficiency		40		%
2f _o	2nd. harmonic			- 30	dBc
3f _o	3rd. harmonic			- 30	dBc
ρ _{in}	Input VSWR			2.8	-
-	Load VSWR tolerance	V _{cc} = 15.2V, P _o = 30W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z _G = 50 Ω	No degradation or destroy		-

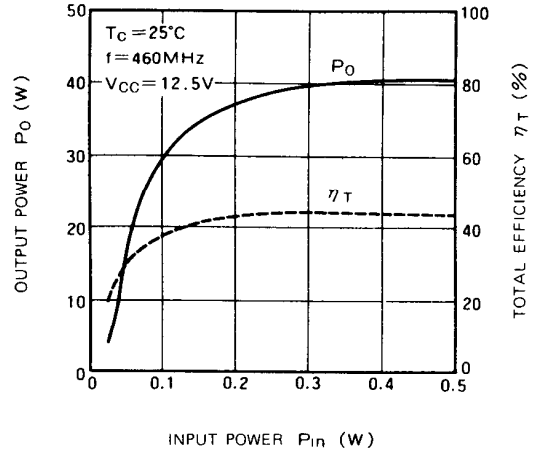
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

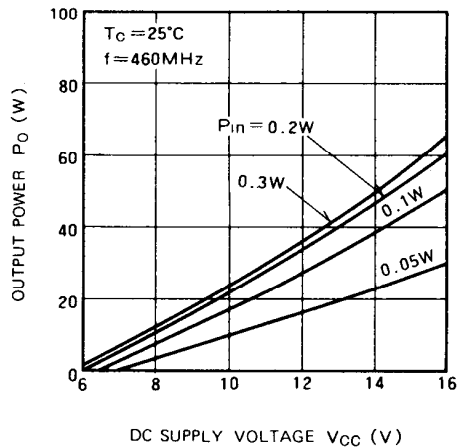
OUTPUT POWER, TOTAL EFFICIENCY,
INPUT VSWR VS. FREQUENCY (M57729H)



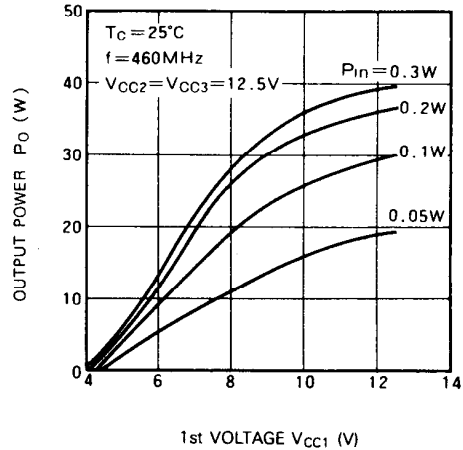
OUTPUT POWER, TOTAL EFFICIENCY,
VS. INPUT POWER (M57729H)



OUTPUT POWER VS. DC SUPPLY
VOLTAGE (M57729H)



OUTPUT POWER VS. 1st
VOLTAGE (M57729H)



OUTPUT IMPEDANCE, INPUT
IMPEDANCE VS. FREQUENCY
(M57729H)

