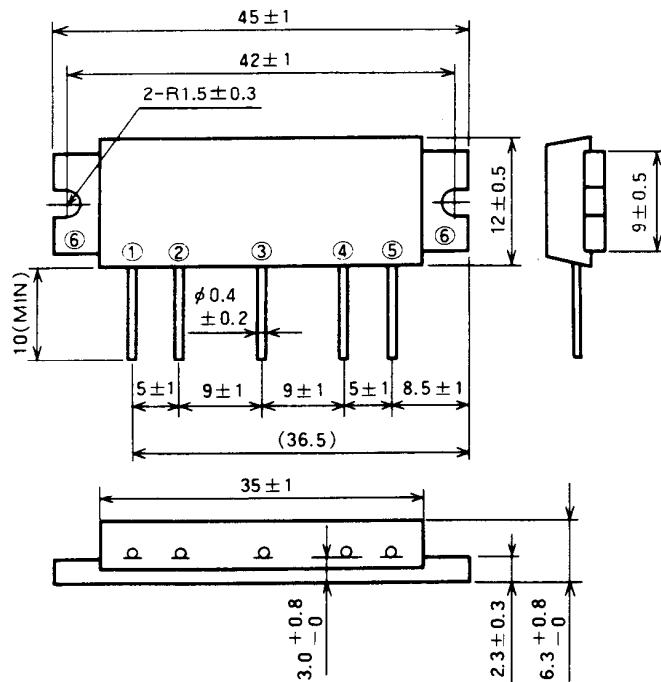


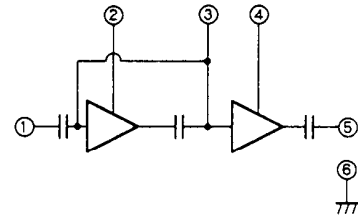
OUTLINE DRAWING

Dimensions in mm



H13

BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② Vcc1 : 1st. DC SUPPLY
- ③ V_{BB} : BASE BIAS SUPPLY
- ④ Vcc2 : 2nd. DC SUPPLY
- ⑤ Po : RF OUTPUT
- ⑥ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		16	V
V _{BB}	Base bias		6	V
I _{cc}	Total current		4	A
P _{in(max)}	Input power	Z _G = Z _L = 50 Ω, V _{cc1} ≤ 12.5V	40	mW
P _{O(max)}	Output power	Z _G = Z _L = 50 Ω	10	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.

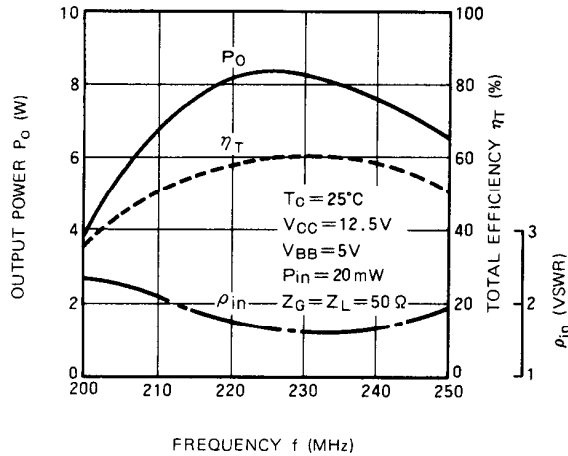
ELECTRICAL CHARACTERISTICS (T_c = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		220	225	MHz
P _O	Output power	P _{in} = 20mW	7		W
η _T	Total efficiency	V _{BB} = 5V	45		%
2f _o	2nd. harmonic	V _{cc} = 12.5V		- 20	dBc
3f _o	3rd. harmonic	Z _G = Z _L = 50 Ω		- 30	dBc
ρ _{in}	Input VSWR			2.5	-
-	Load VSWR tolerance	V _{cc} = 13.2V, V _{BB} = 5V P _O = 7W (P _{in} : controlled) Load VSWR ≥ 20:1 (All phase), 2sec. Z _G = 50 Ω	No degradation or destroy		-

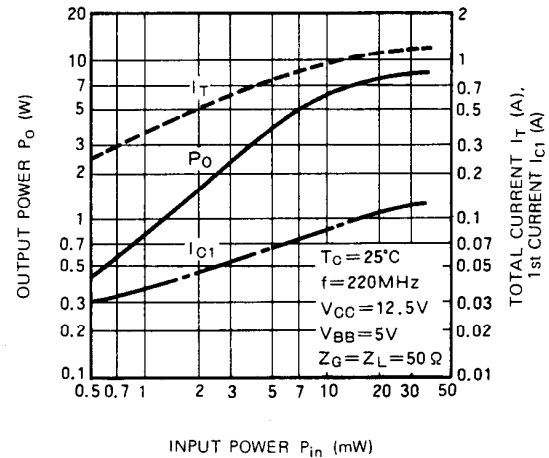
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

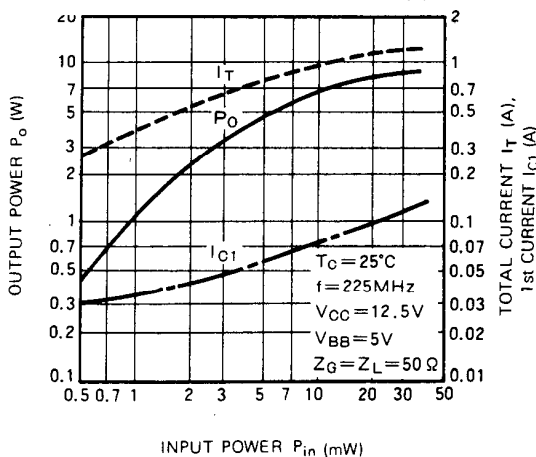
OUTPUT POWER, TOTAL EFFICIENCY,
 ρ_{in} VS. FREQUENCY CHARACTERISTICS



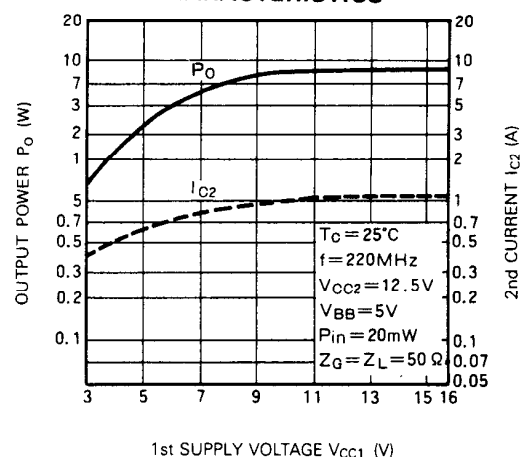
OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. INPUT
POWER CHARACTERISTICS



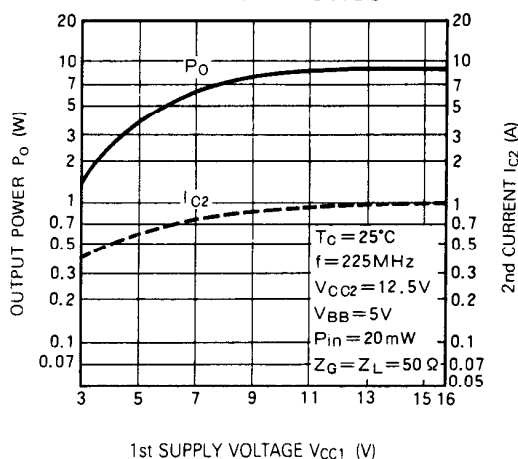
OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. INPUT
POWER CHARACTERISTICS



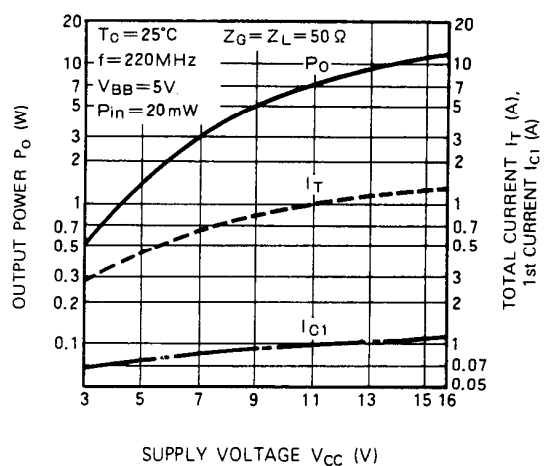
OUTPUT POWER, 2nd CURRENT
VS. 1st SUPPLY VOLTAGE
CHARACTERISTICS



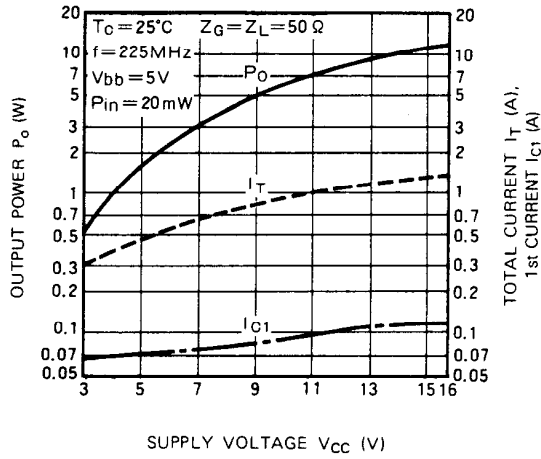
OUTPUT POWER, 2nd CURRENT
VS. 1st SUPPLY VOLTAGE
CHARACTERISTICS



OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. SUPPLY
VOLTAGE CHARACTERISTICS



OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. SUPPLY
VOLTAGE CHARACTERISTICS



2nd, 3rd HARMONIC VS. FREQUENCY
CHARACTERISTICS

