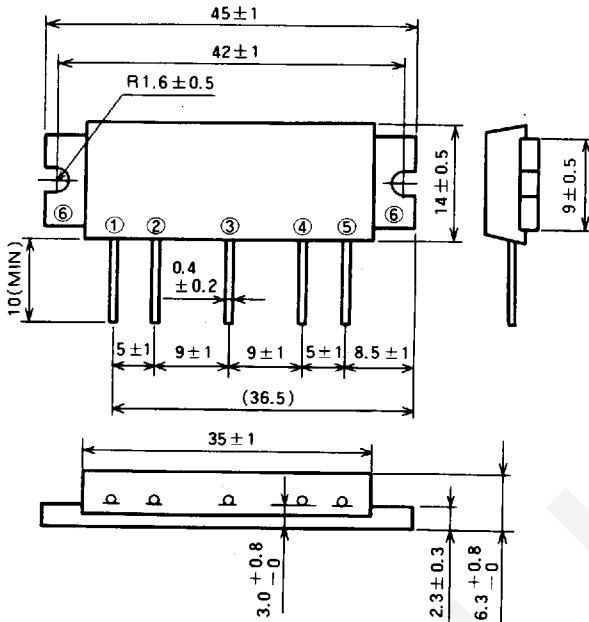




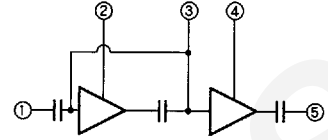
OUTLINE DRAWING

Dimensions in mm



H13

BLOCK DIAGRAM



PIN :

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

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

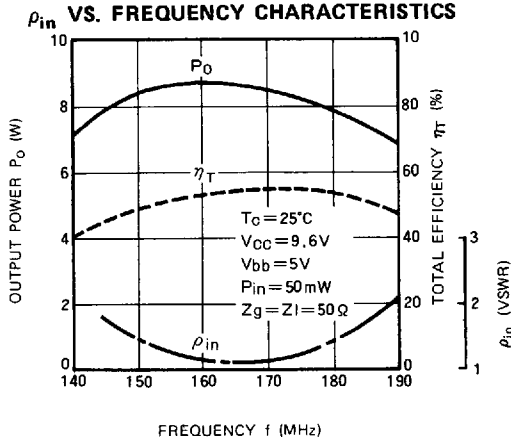
Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		13	V
V _{BB}			6	V
I _{cc}	Total current		4	A
P _{in(max)}	Input power	Z _G = Z _L = 50 Ω	80	mW
P _{o(max)}	Output power	Z _G = Z _L = 50 Ω	10	W
T _{c(OP)}	Operation case temperature		-30~110	°C
T _{stg}	Storage temperature		-40~110	°C

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

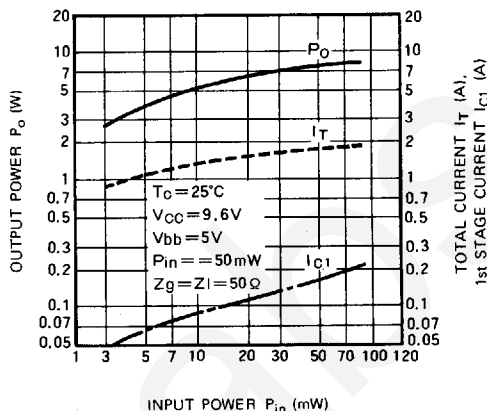
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P _{in} = 50mW V _{BB} = 5V V _{cc} = 9.6V Z _G = Z _L = 50 Ω	150	175	MHz
P _o	Output power		7		W
η _T	Total efficiency		40		%
2f _o	2nd. harmonic			-20	dB
3f _o	3rd. harmonic			-30	dB
ρ _{in}	Input VSWR			2.5	-
-	Load VSWR tolerance	V _{cc1, 2} = 13V, V _{BB} = 5V P _o = 7W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z _G = 50 Ω	No degradation		-

TYPICAL PERFORMANCE DATA

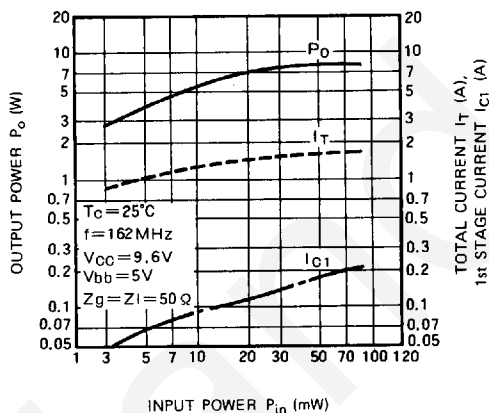
OUTPUT POWER, TOTAL EFFICIENCY, VS. FREQUENCY CHARACTERISTICS



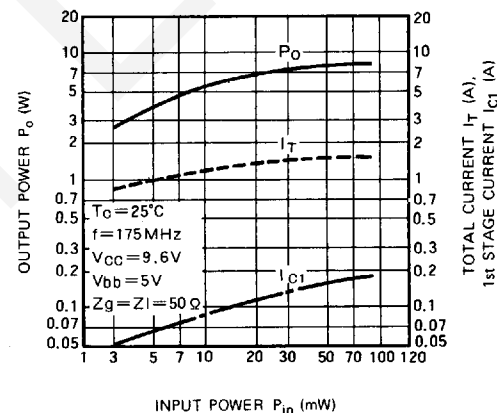
OUTPUT POWER, TOTAL CURRENT, 1st STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



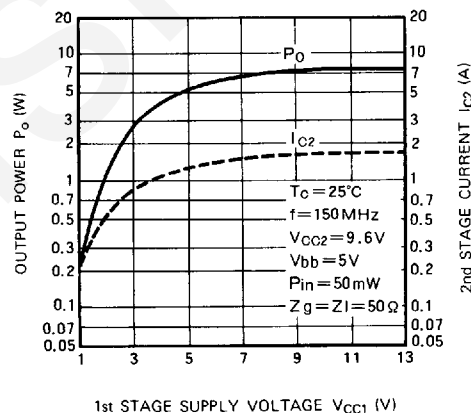
OUTPUT POWER, TOTAL CURRENT, 1st STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



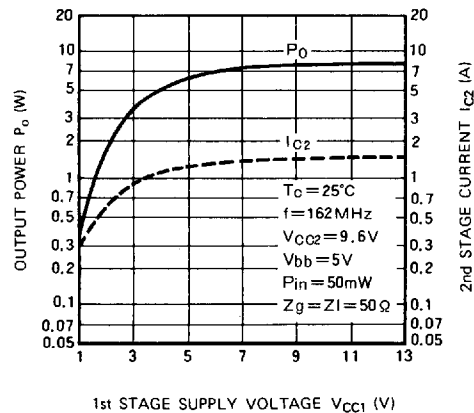
OUTPUT POWER, TOTAL CURRENT, 1st STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



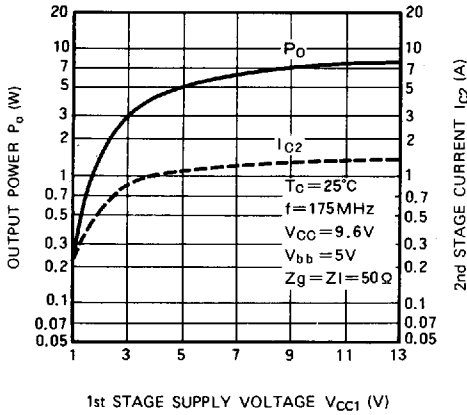
OUTPUT POWER, 2nd STAGE CURRENT VS. 1st STAGE SUPPLY VOLTAGE CHARACTERISTICS



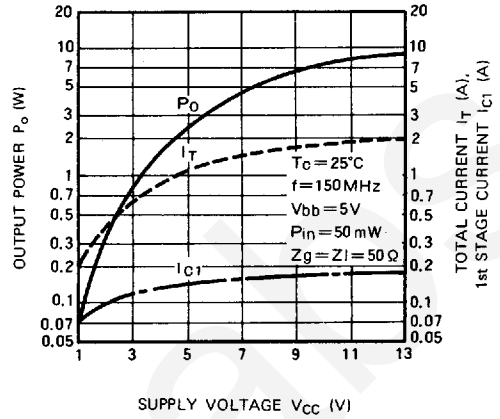
OUTPUT POWER, 2nd STAGE CURRENT VS. 1st STAGE SUPPLY VOLTAGE CHARACTERISTICS



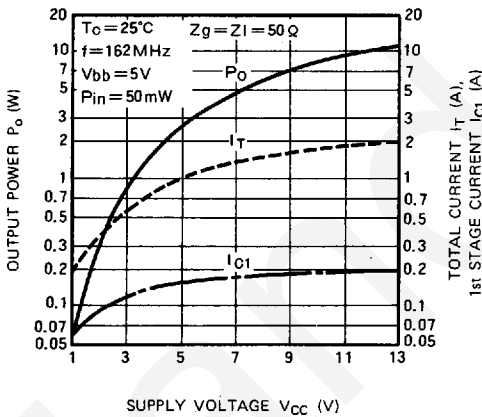
OUTPUT POWER, 2nd STAGE CURRENT VS. 1st STAGE SUPPLY VOLTAGE CHARACTERISTICS



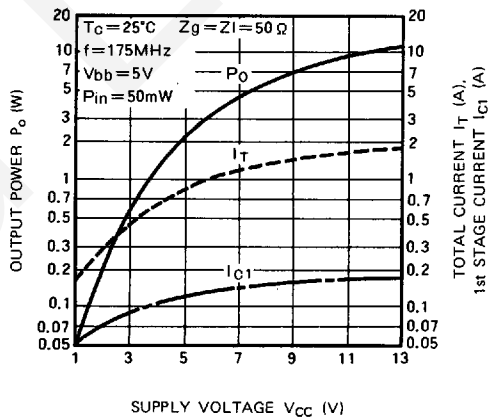
OUTPUT POWER, TOTAL CURRENT, 1st STAGE CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



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



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



2nd, 3rd HARMONIC VS. FREQUENCY CHARACTERISTICS

