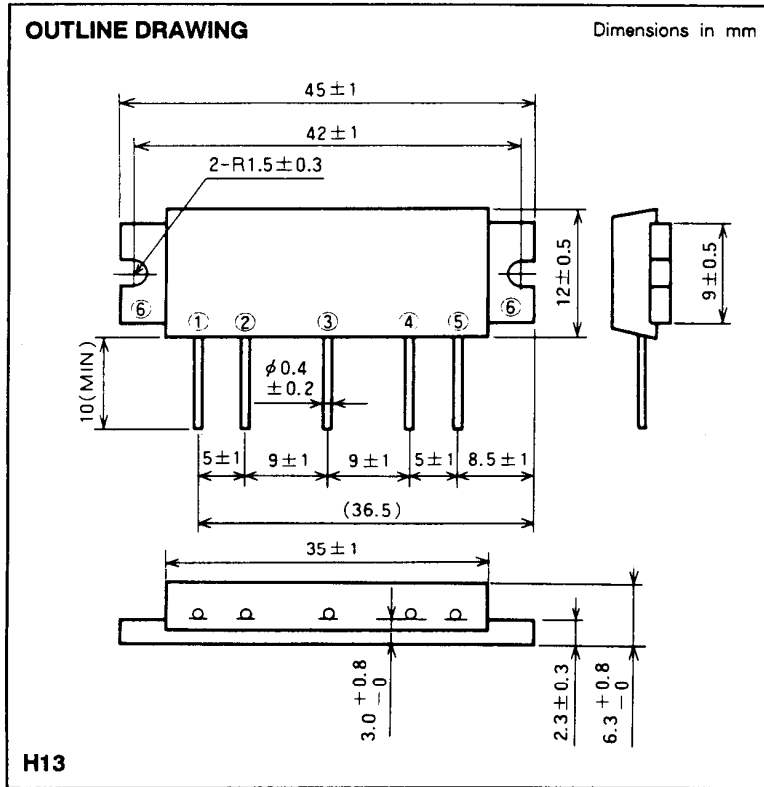
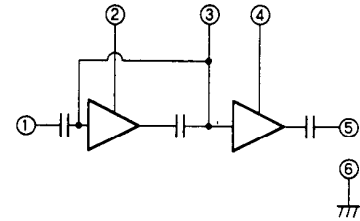


M67785

184-200MHz, 9.6V, 5W, FM PORTABLE RADIO



BLOCK DIAGRAM



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

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

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		13	V
VBB	Base bias		5.5	V
Icc	Total current		4	A
Pin(max)	Input power	ZG = ZL = 50 Ω, Vcc1 ≤ 9.6V	30	mW
Po(max)	Output power	ZG = ZL = 50 Ω	7	W
Tc(OP)	Operation case temperature		- 30 to 110	°C
Tstg	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

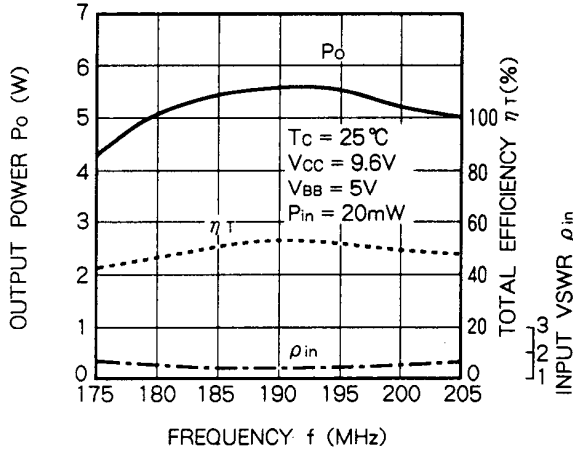
ELECTRICAL CHARACTERISTICS (Tc = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Pin = 20mW VBB = 5V Vcc = 9.6V ZG = ZL = 50 Ω	184	200	MHz
Po	Output power		5		W
ηT	Total efficiency		40		%
2fo	2nd. harmonic			- 20	dBc
3fo	3rd. harmonic			- 25	dBc
ρin	Input VSWR			2.5	-
-	Load VSWR tolerance	Vcc2 = 13V, VBB = 5V, Pin = 20mW Po = 5W (Vcc1 : controlled) Load VSWR=20:1 (All phase), 2sec. ZG = 50 Ω	No degradation or destroy		-

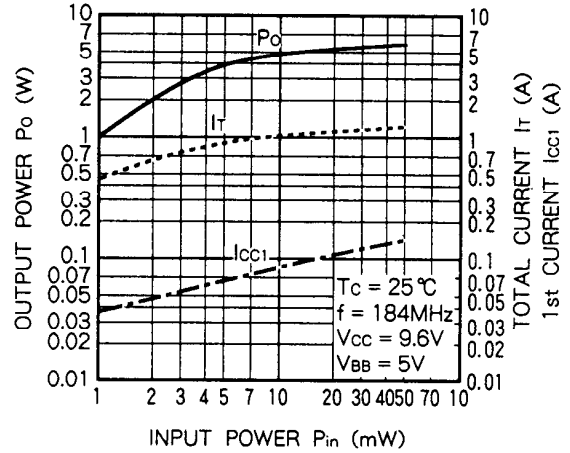
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

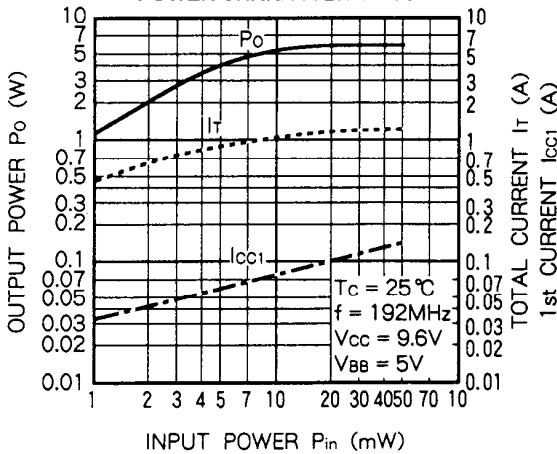
OUTPUT POWER, TOTAL EFFICIENCY, ρ_{in} VS. FREQUENCY CHARACTERISTICS



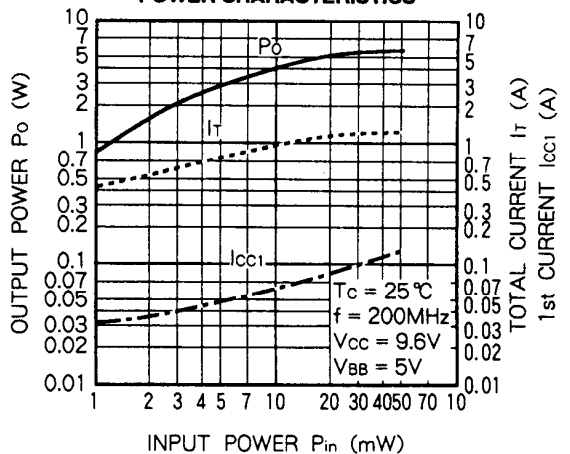
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. INPUT POWER CHARACTERISTICS



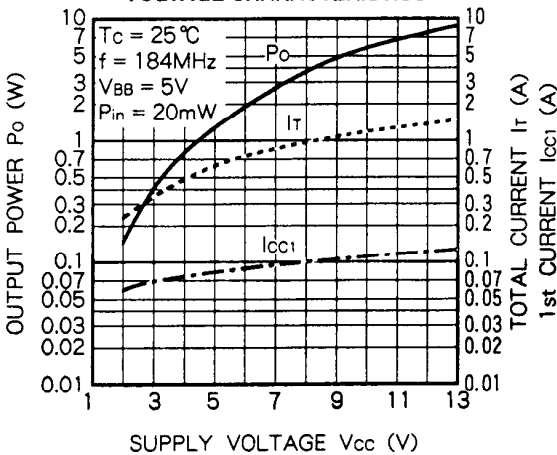
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. INPUT POWER CHARACTERISTICS



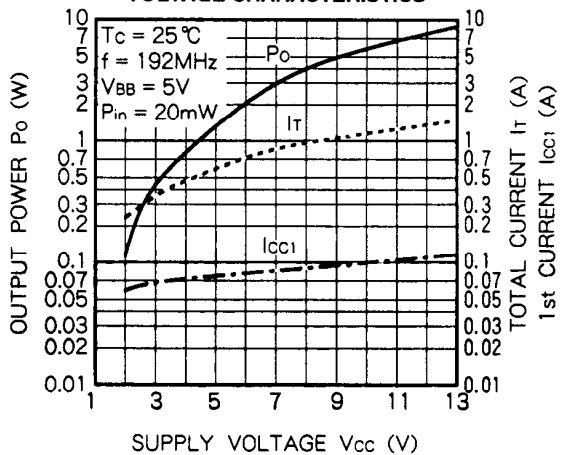
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. INPUT POWER CHARACTERISTICS



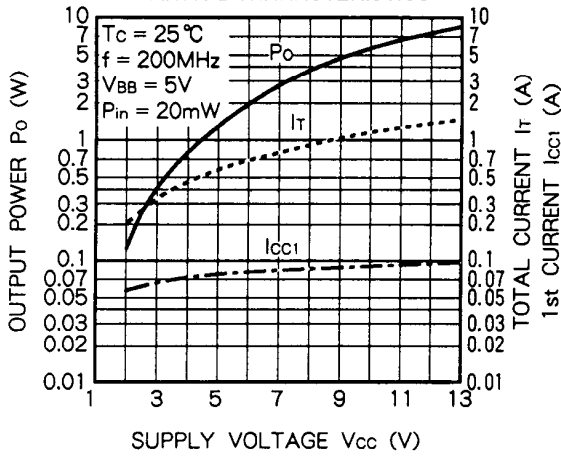
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



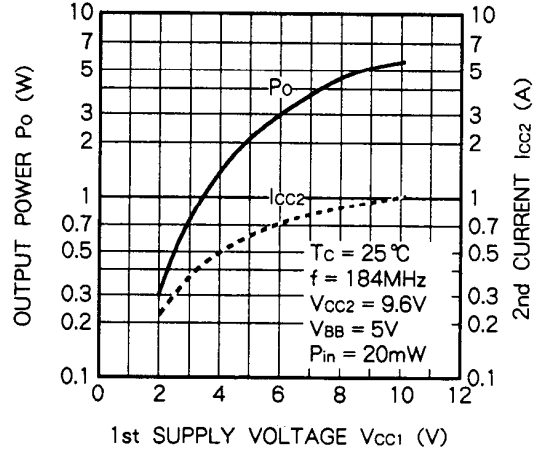
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



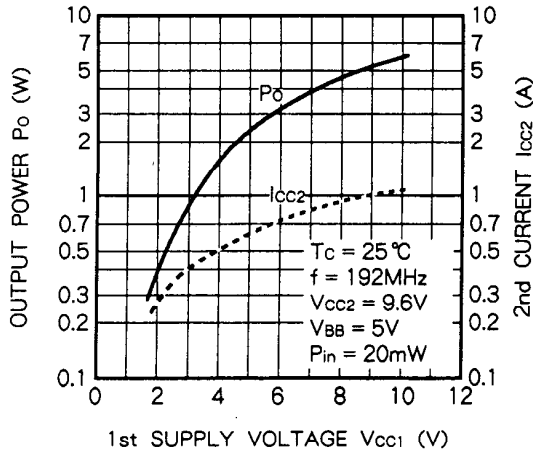
OUTPUT POWER, TOTAL CURRENT, 1st CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS



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



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



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

