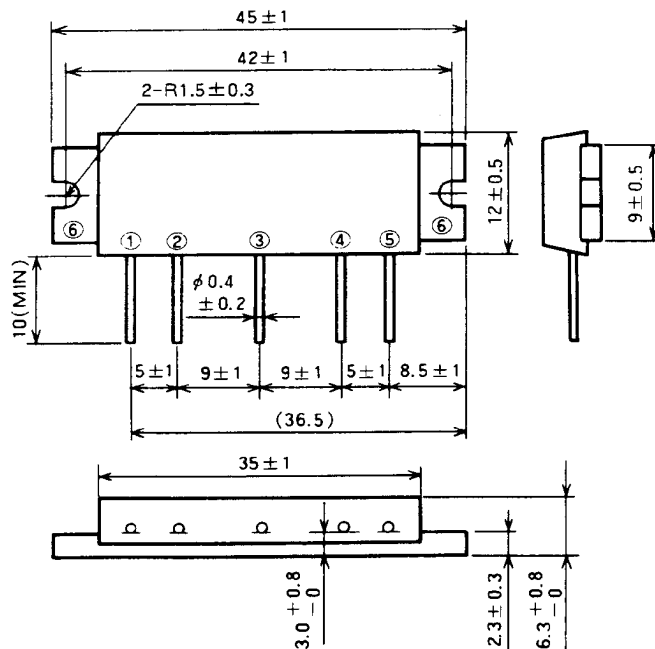


M67723

220-225MHz, 12.5V, 7W, FM PORTABLE RADIO

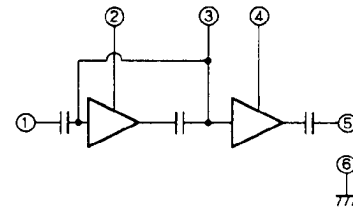
OUTLINE DRAWING

Dimensions in mm



H13

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		16	V
VBB	Base bias		6	V
Icc	Total current		4	A
Pin(max)	Input power	ZG = ZL = 50 Ω, Vcc1 ≤ 12.5V	40	mW
Po(max)	Output power	ZG = ZL = 50 Ω	10	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)

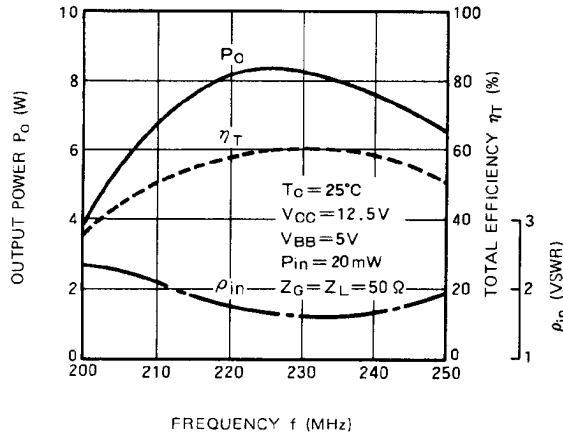
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	Pin = 20mW VBB = 5V Vcc = 12.5V ZG = ZL = 50 Ω	220	225	MHz
Po	Output power		7		W
η T	Total efficiency		45		%
2fo	2nd. harmonic			- 20	dBc
3fo	3rd. harmonic			- 30	dBc
ρ in	Input VSWR			2.5	-
-	Load VSWR tolerance	Vcc = 13.2V, VBB = 5V Po = 7W (Pin : 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.

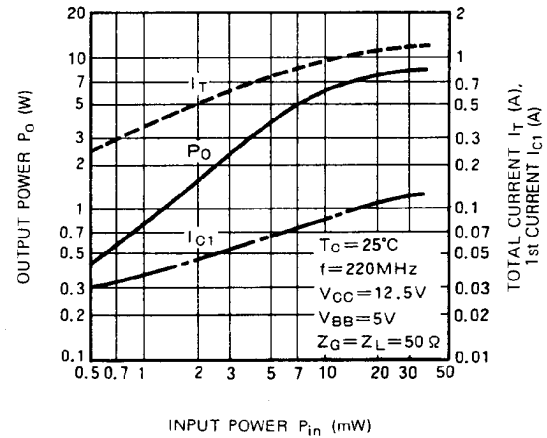
NOV. '97

TYPICAL PERFORMANCE DATA

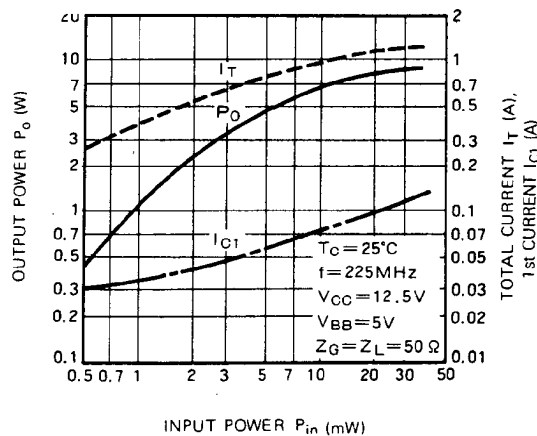
OUTPUT POWER, TOTAL EFFICIENCY,
 ρ_{in} VS. FREQUENCY CHARACTERISTICS



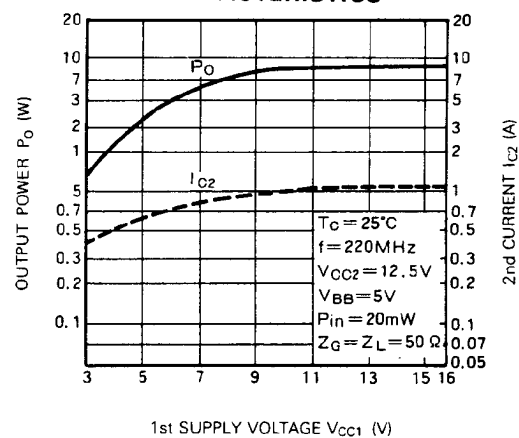
OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. INPUT
POWER CHARACTERISTICS



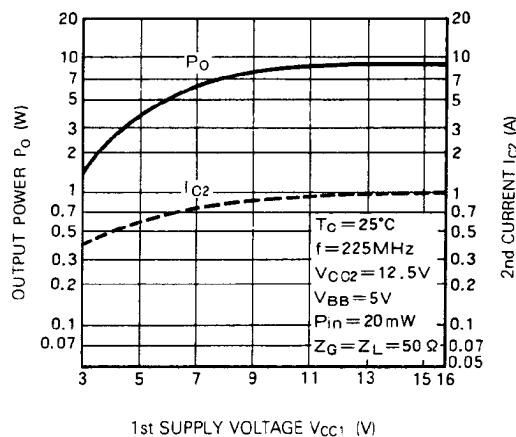
OUTPUT POWER, TOTAL CURRENT,
1st CURRENT VS. INPUT
POWER CHARACTERISTICS



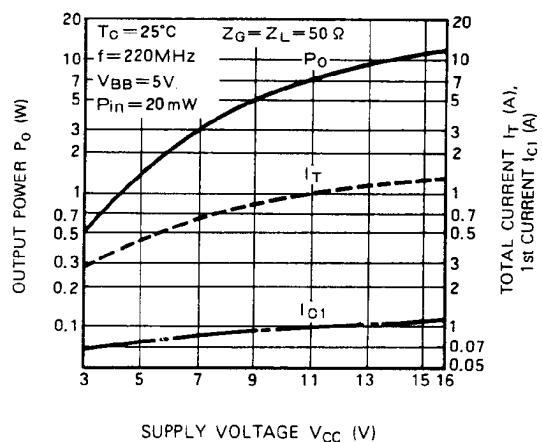
OUTPUT POWER, 2nd CURRENT
VS. 1st SUPPLY VOLTAGE
CHARACTERISTICS



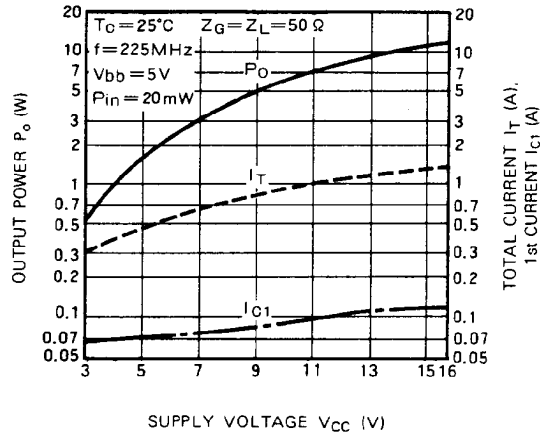
OUTPUT POWER, 2nd CURRENT
VS. 1st SUPPLY VOLTAGE
CHARACTERISTICS



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

