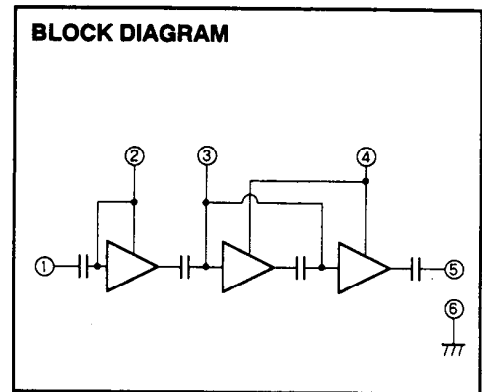
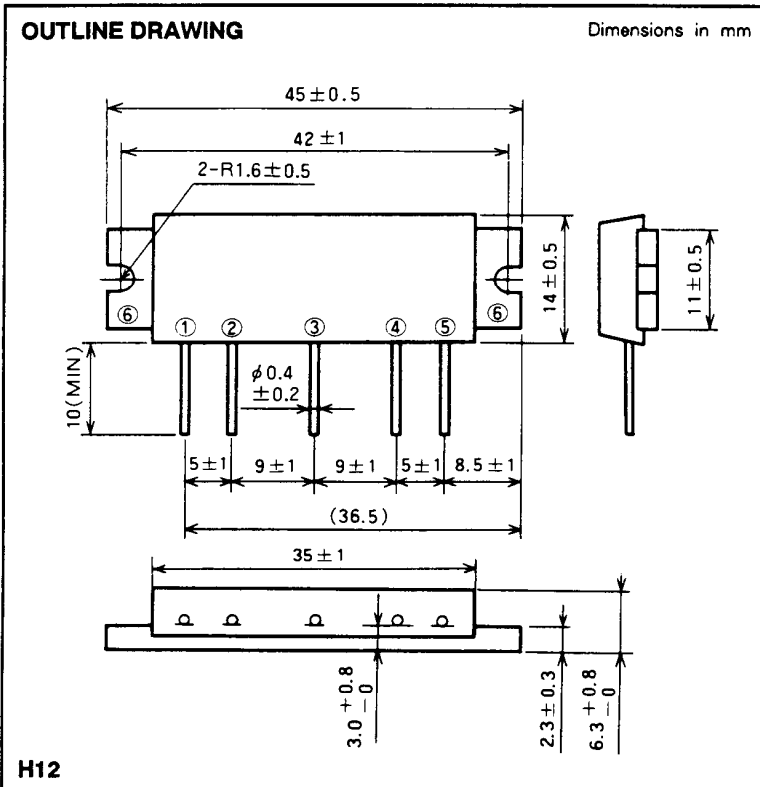


# M67755H

150-175MHz, 7.2V, 7W, FM PORTABLE RADIO



- PIN :
- ① Pin : RF INPUT
  - ② Vcc1 : 1st. DC SUPPLY
  - ③ V<sub>BB</sub> : BASE BIAS SUPPLY
  - ④ Vcc2 : 2nd. DC SUPPLY
  - ⑤ P<sub>o</sub> : RF OUTPUT
  - ⑥ GND : FIN

**ABSOLUTE MAXIMUM RATINGS** (T<sub>c</sub> = 25 °C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>cc</sub>	Supply voltage	V <sub>BB</sub> ≤ 5V	9.2	V
V <sub>BB</sub>	Base bias		5.5	V
I <sub>cc</sub>	Total current		4	A
P <sub>in(max)</sub>	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω, V <sub>cc1</sub> ≤ 7.2V	4	mW
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	10	W
T <sub>c(OP)</sub>	Operation case temperature		- 30 to 110	°C
T <sub>stg</sub>	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

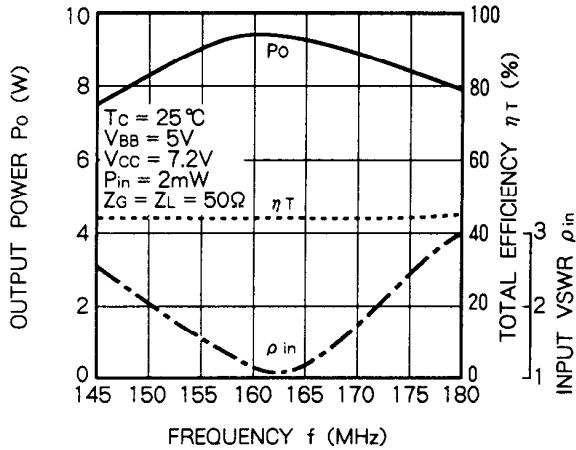
**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub> = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range		150	175	MHz
P <sub>o</sub>	Output power	P <sub>in</sub> = 2mW	7		W
η <sub>T</sub>	Total efficiency	V <sub>BB</sub> = 5V	40		%
2f <sub>o</sub>	2nd. harmonic	V <sub>cc</sub> = 7.2V		- 25	dBc
3f <sub>o</sub>	3rd. harmonic	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω		- 30	dBc
ρ <sub>in</sub>	Input VSWR			3.5	-
-	Load VSWR tolerance	V <sub>cc2</sub> = 9V, V <sub>BB</sub> = 5V, P <sub>in</sub> = 2mW P <sub>o</sub> = 7W (V <sub>cc1</sub> : controlled) Load VSWR=20:1 (All phase), 2sec. Z <sub>G</sub> = 50 Ω	No degradation or destroy		-

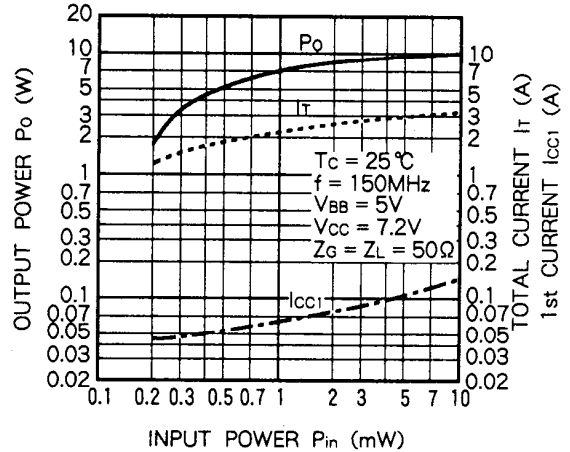
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

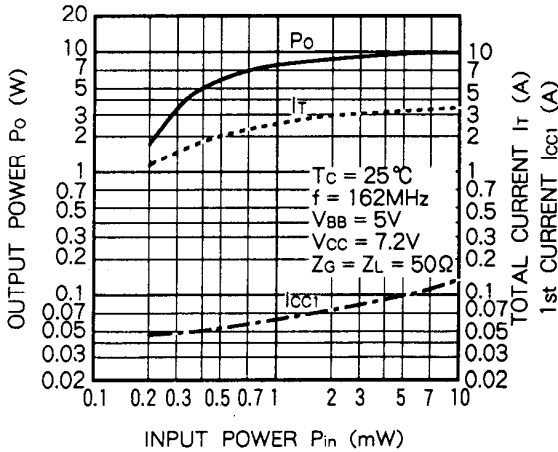
OUTPUT POWER, TOTAL CURRENT, INPUT VSWR VS. FREQUENCY CHARACTERISTICS



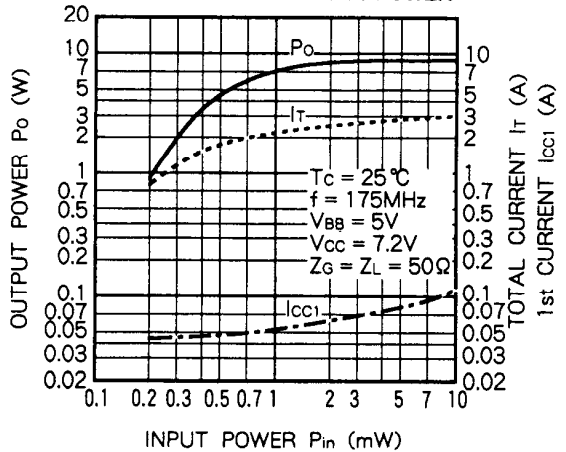
OUTPUT POWER, TOTAL CURRENT, FIRST CURRENT VS. INPUT POWER



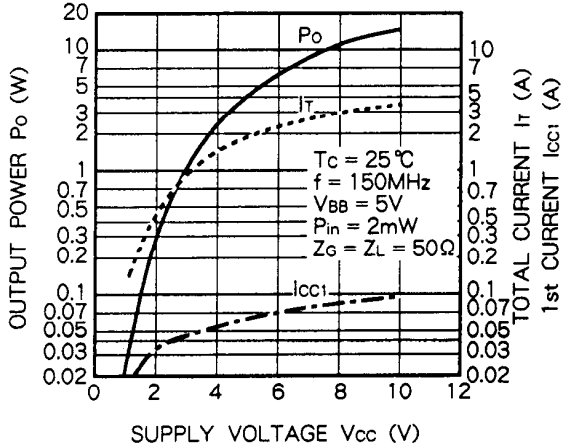
OUTPUT POWER, TOTAL CURRENT, FIRST CURRENT VS. INPUT POWER



OUTPUT POWER, TOTAL CURRENT, FIRST CURRENT VS. INPUT POWER



OUTPUT POWER, TOTAL CURRENT, FIRST CURRENT VS. SUPPLY VOLTAGE



OUTPUT POWER, TOTAL CURRENT, FIRST CURRENT VS. SUPPLY VOLTAGE

