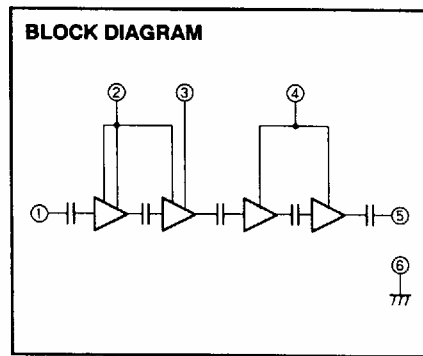
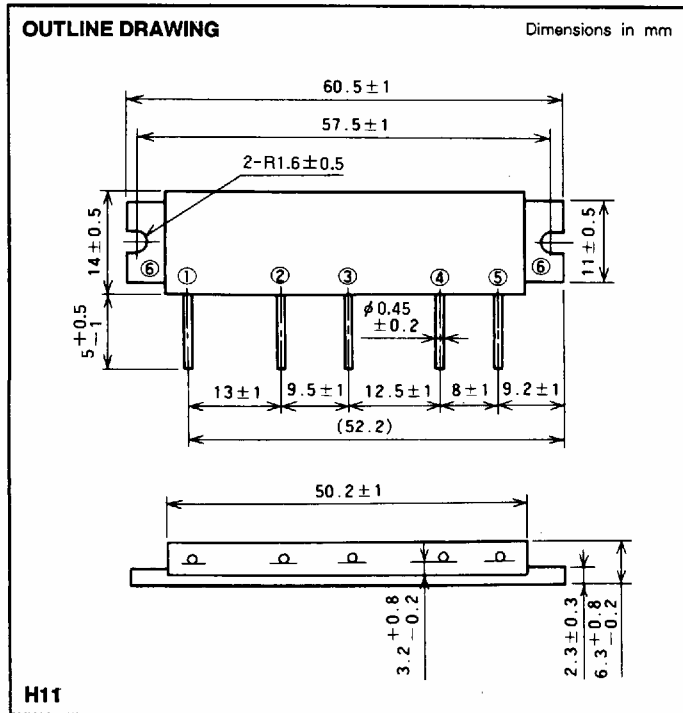


# M67754

824-849MHz, 12.5V, 6W, FM MOBILE RADIO



PIN :

- ① P<sub>in</sub> : RF INPUT
- ② V<sub>CC1</sub> : 1st. DC SUPPLY
- ③ V<sub>CC2</sub> : 2nd. DC SUPPLY
- ④ V<sub>CC3</sub> : 3rd. 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>CC1, 2</sub>	Supply voltage		9	V
V <sub>CC3</sub>			17	V
I <sub>CC</sub>	Total current		4	A
P <sub>in(max)</sub>	Input power	f=824-849MHz, V <sub>CC1</sub> ≤ 8V, Z <sub>G</sub> =Z <sub>L</sub> =50 Ω	10	mW
P <sub>o(max)</sub>	Output power	Ditto	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)

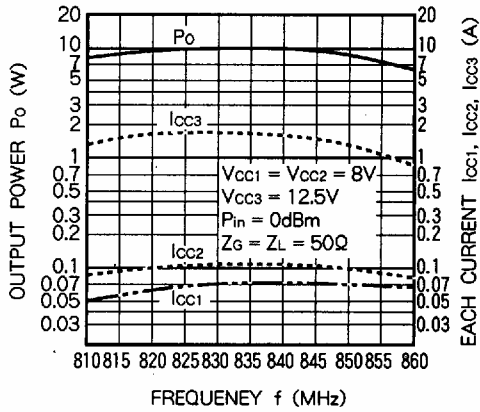
Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V <sub>CC1</sub> = V <sub>CC2</sub> = 8V, V <sub>CC3</sub> = 12.5V	824	849	MHz
P <sub>o</sub>	Output power	P <sub>in</sub> = 1mW, Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	6		W
η <sub>T</sub>	Total efficiency	V <sub>CC1</sub> = 8V, P <sub>o</sub> = 6W (V <sub>CC2</sub> : controlled)	35		%
2f <sub>o</sub>	2nd. harmonic	V <sub>CC3</sub> = 12.5V, P <sub>in</sub> = 1mW		- 30	dBc
ρ <sub>in</sub>	Input VSWR	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω		2.5	-
-	Load VSWR tolerance	V <sub>CC1</sub> = 8V, V <sub>CC3</sub> = 15.2V P <sub>o</sub> = 6W (V <sub>CC2</sub> : controlled) P <sub>in</sub> = 1mW Load VSWR=20:1 (All phase), 5sec.	No degradation or destroy		-

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

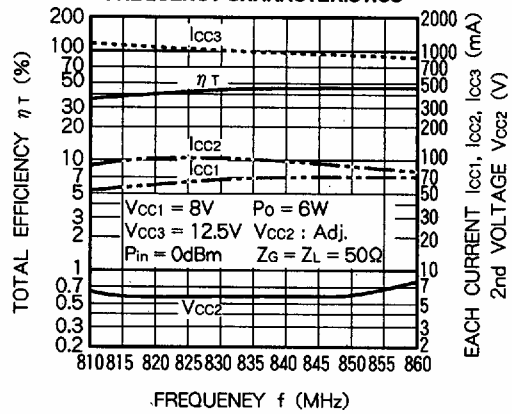


TYPICAL PERFORMANCE DATA

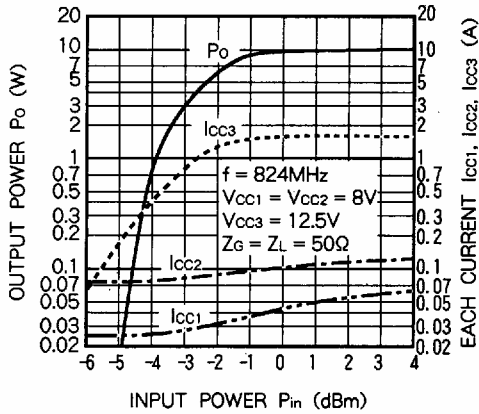
OUTPUT POWER, EACH CURRENT VS. FREQUENCY CHARACTERISTICS



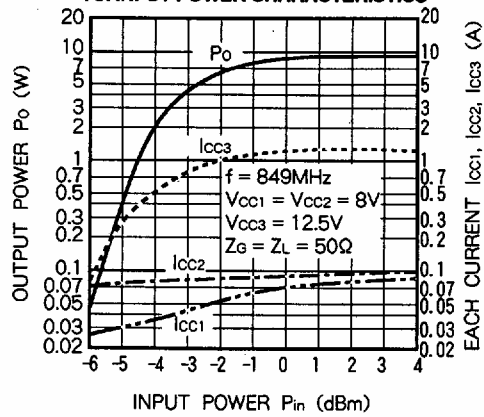
TOTAL EFFICIENCY, EACH CURRENT 2nd VOLTAGE VS. FREQUENCY CHARACTERISTICS



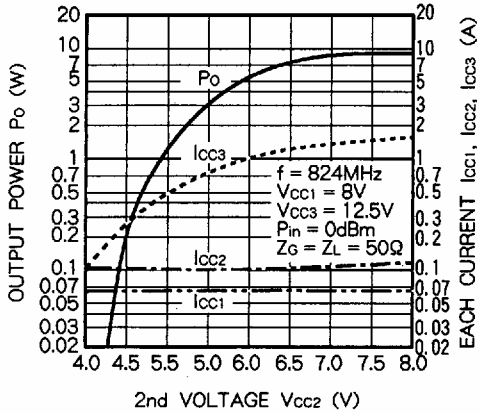
OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. INPUT POWER CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. 2nd VOLTAGE CHARACTERISTICS



OUTPUT POWER, EACH CURRENT VS. 2nd VOLTAGE CHARACTERISTICS

