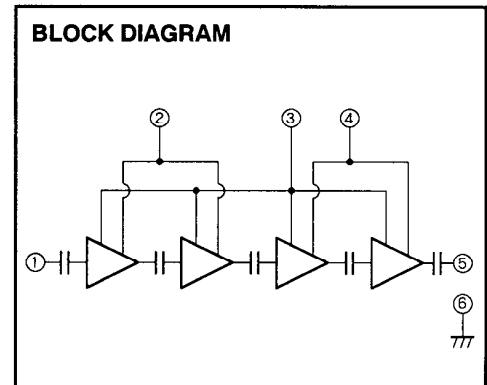
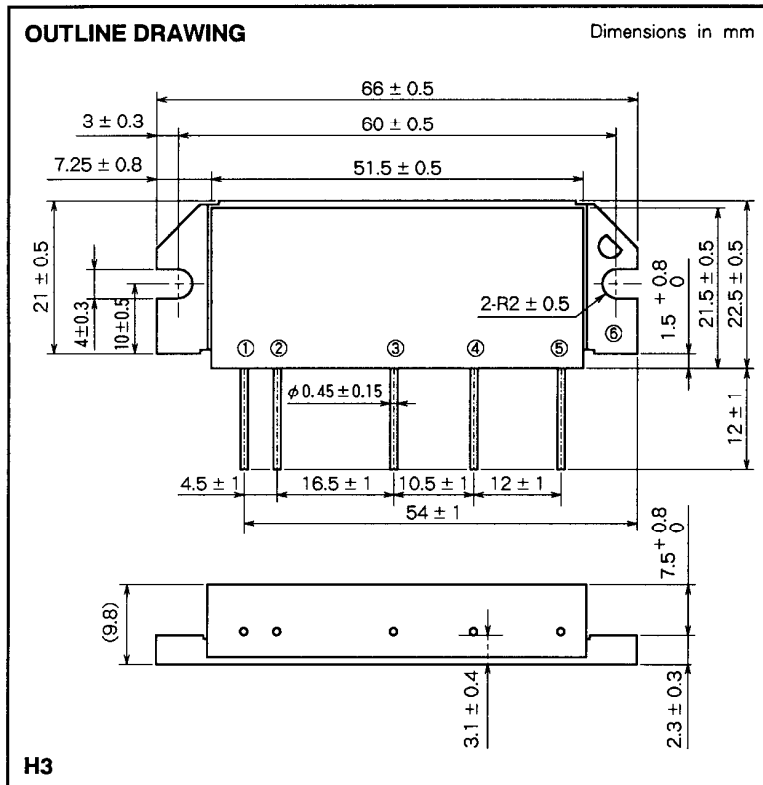


# M68719

1240-1300MHz, 12.5V, 16W, FM MOBILE RADIO



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

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>cc1, 2</sub>	Supply voltage		17	V
V <sub>BB</sub>	Base bias		8.5	V
I <sub>cc</sub>	Total current		8	A
P <sub>in(max)</sub>	Input power	V <sub>cc1</sub> = 12.5V, V <sub>BB</sub> = 8V, Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	0.16	W
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	20	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.

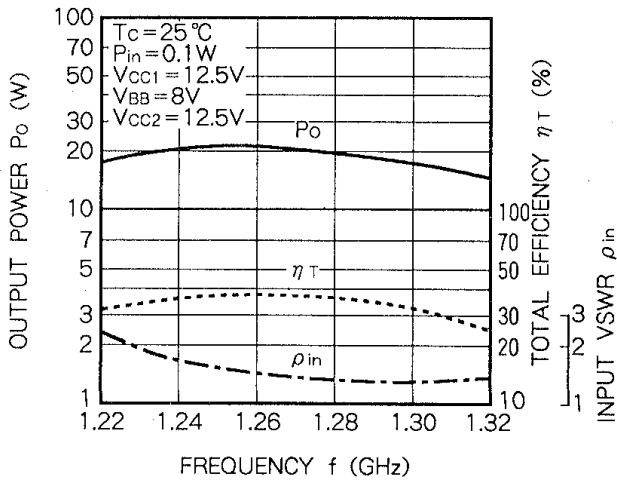
**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub> = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V <sub>cc1</sub> = V <sub>cc2</sub> = 12.5V V <sub>BB</sub> = 8V P <sub>in</sub> = 0.1W Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	1.24	1.3	GHz
P <sub>o</sub>	Output power		16		W
η <sub>T</sub>	Total efficiency		28		%
2f <sub>o</sub>	2nd. harmonic		- 45		dBc
ρ <sub>in</sub>	Input VSWR		2.5		-
-	Load VSWR tolerance	V <sub>BB</sub> = 8V, V <sub>cc2</sub> = 15.2V, P <sub>in</sub> = 0.1W P <sub>o</sub> = 16W (V <sub>cc1</sub> : controlled), Load VSWR=16:1(All phase) Z <sub>G</sub> = 50Ω	No degradation or destroy		-

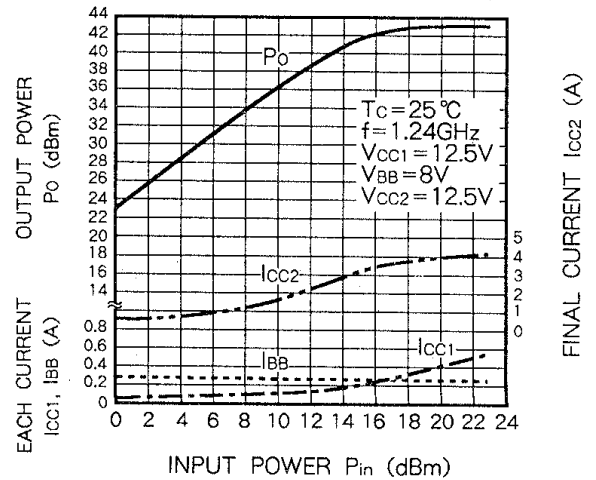
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

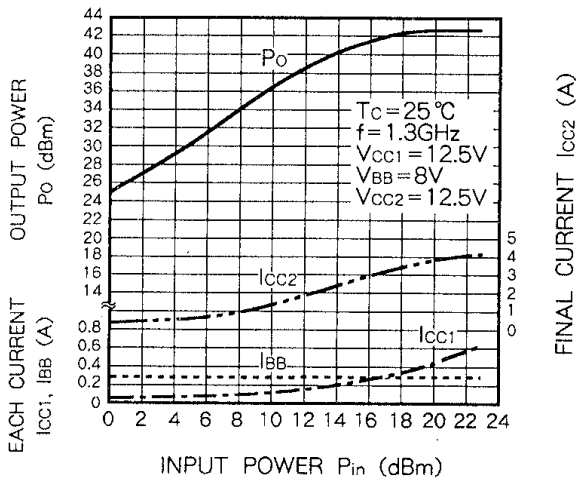
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR  
VS. FREQUENCY CHARACTERISTICS



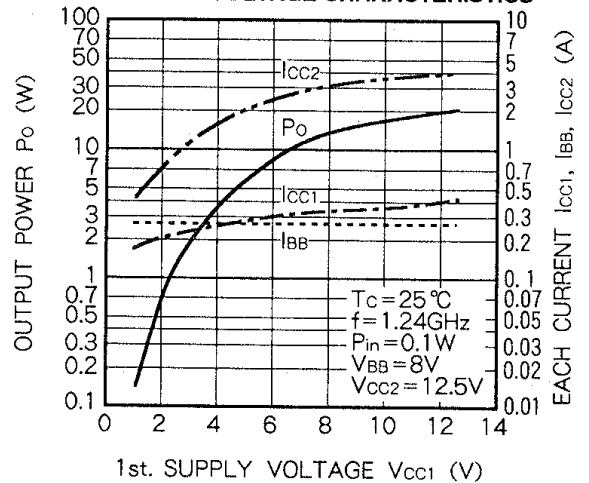
OUTPUT POWER EACH CURRENT VS.  
INPUT POWER CHARACTERISTICS



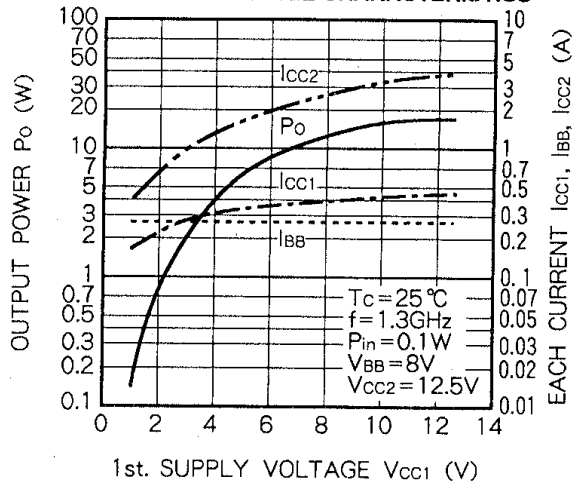
OUTPUT POWER EACH CURRENT VS.  
INPUT POWER CHARACTERISTICS



OUTPUT POWER EACH CURRENT VS.  
1st. SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER EACH CURRENT VS.  
1st. SUPPLY VOLTAGE CHARACTERISTICS



OUTPUT POWER EACH CURRENT VS.  
SUPPLY VOLTAGE CHARACTERISTICS

