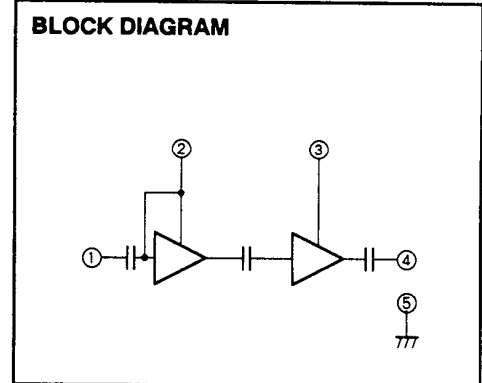
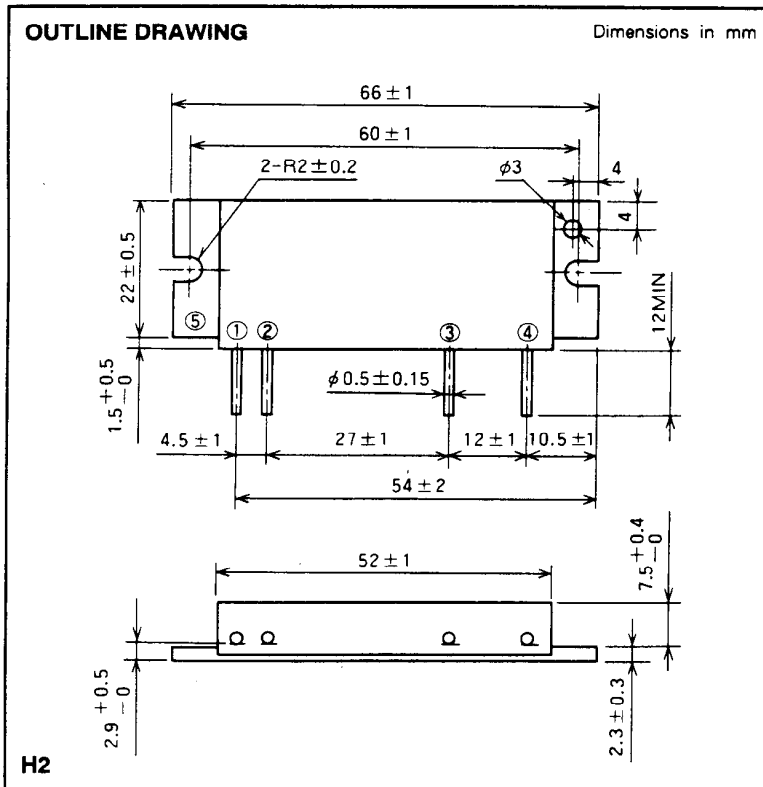


M57719

145-175MHz, 12.5V, 14W, FM MOBILE RADIO



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

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

| Symbol | Parameter | Conditions | Ratings | Unit |
|----------------------|----------------------------|--|-------------|------|
| V _{cc} | Supply voltage | | 17 | V |
| I _{cc} | Total current | | 6 | A |
| P _{in(max)} | Input power | Z _G = Z _L = 50 Ω | 0.4 | W |
| P _{o(max)} | Output power | Z _G = Z _L = 50 Ω | 20 | W |
| T _{c(OP)} | Operation case temperature | | - 30 to 110 | °C |
| T _{stg} | Storage temperature | | - 40 to 110 | °C |

Note. Above parameters are guaranteed independently.

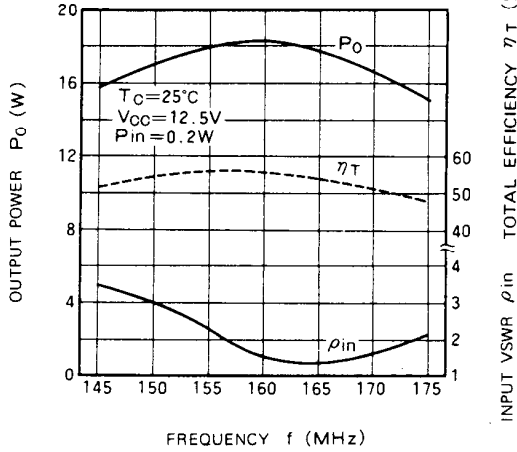
ELECTRICAL CHARACTERISTICS (T_c = 25 °C unless otherwise noted)

| Symbol | Parameter | Test conditions | Limits | | Unit |
|-----------------|---------------------|--|---------------------------|------|------|
| | | | Min | Max | |
| f | Frequency range | P _{in} = 0.2W V _{cc} = 12.5V Z _G = Z _L = 50 Ω | 145 | 175 | MHz |
| P _o | Output power | | 14 | | W |
| η _T | Total efficiency | | 40 | | % |
| 2f _o | 2nd. harmonic | | | - 25 | dBc |
| 3f _o | 3rd. harmonic | | | - 35 | dBc |
| ρ _{in} | Input VSWR | | | 4 | - |
| - | Load VSWR tolerance | V _{cc} = 15.2V, P _o = 14W (P _{in} : controlled) Load VSWR=20:1 (All phase), 2sec. Z _G = 50Ω | No degradation or destroy | | - |

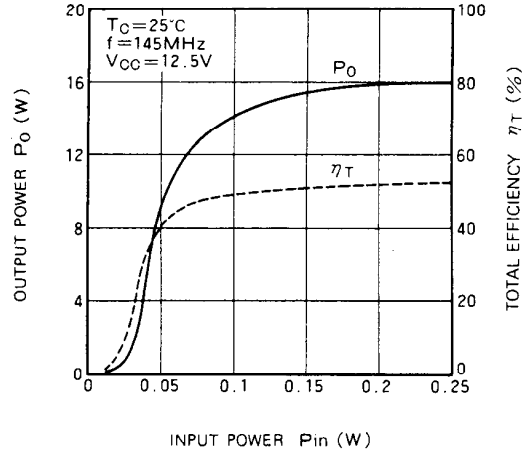
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

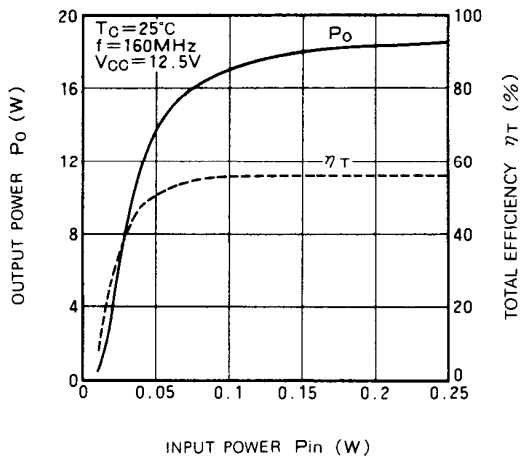
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY



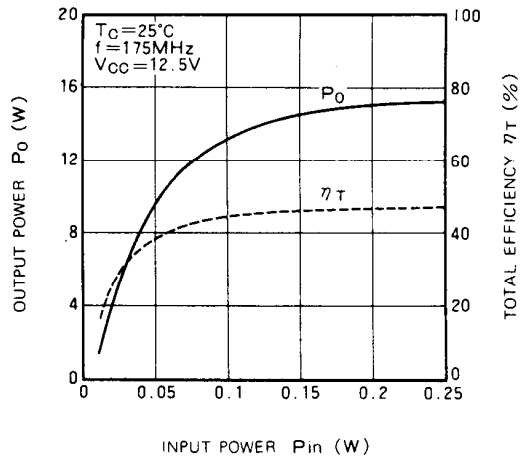
OUTPUT POWER, TOTAL EFFICIENCY, VS. INPUT POWER



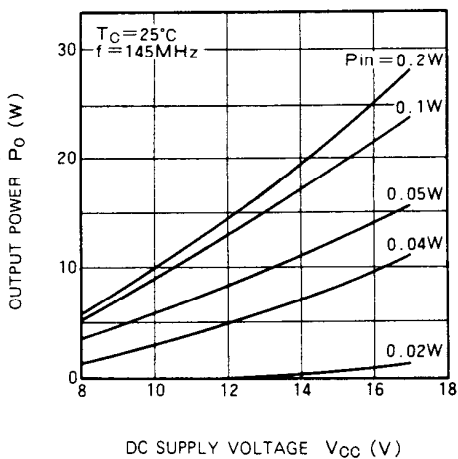
OUTPUT POWER, TOTAL EFFICIENCY, VS. INPUT POWER



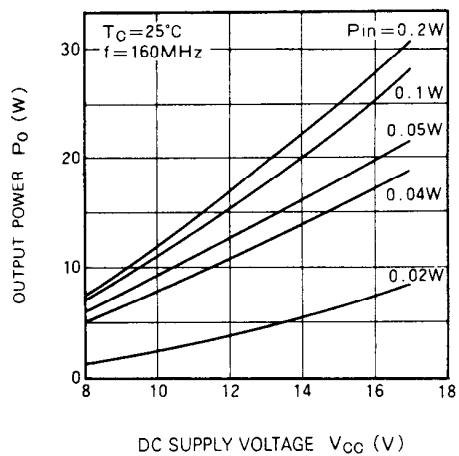
OUTPUT POWER, TOTAL EFFICIENCY, VS. INPUT POWER



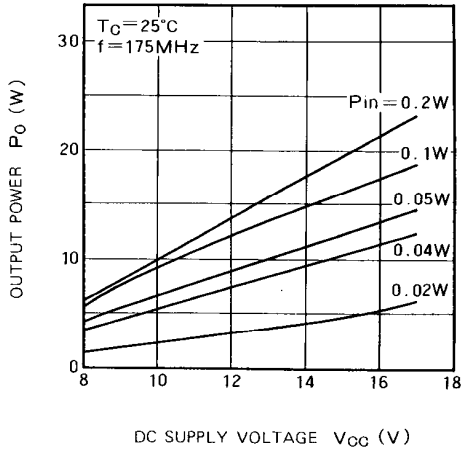
OUTPUT POWER VS. DC SUPPLY VOLTAGE



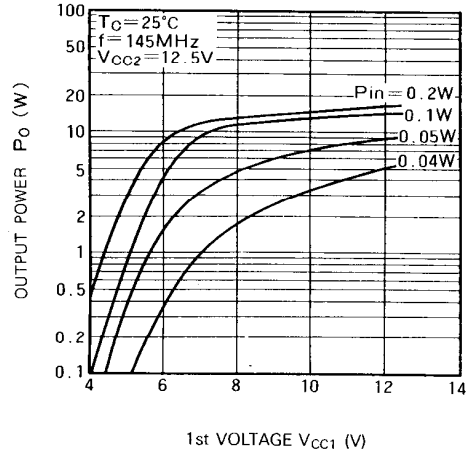
OUTPUT POWER VS. DC SUPPLY VOLTAGE



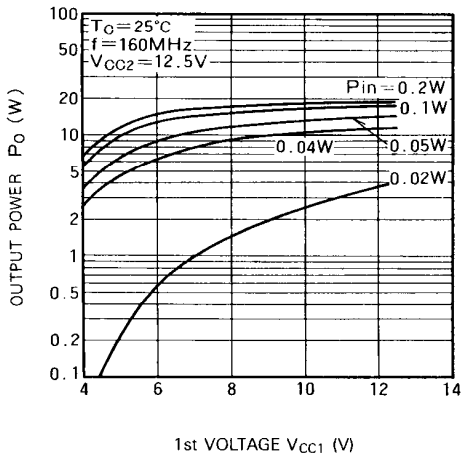
OUTPUT POWER VS. DC SUPPLY VOLTAGE



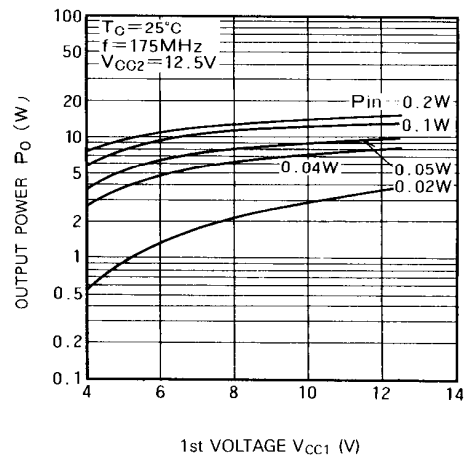
OUTPUT POWER VS. 1st VOLTAGE



OUTPUT POWER VS. 1st VOLTAGE



OUTPUT POWER VS. 1st VOLTAGE



OUTPUT IMPEDANCE, INPUT IMPEDANCE VS. FREQUENCY

