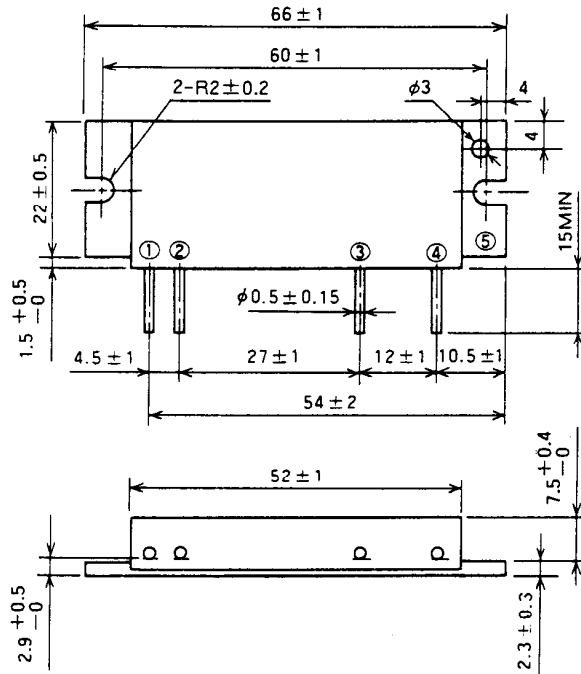


M57774S

185-200MHz, 12.5V, 30W, FM MOBILE RADIO

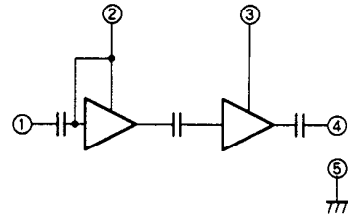
OUTLINE DRAWING

Dimensions in mm



H2

BLOCK DIAGRAM



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 (Tc = 25°C unless otherwise noted)

| Symbol | Parameter | Conditions | Ratings | Unit |
|----------------------|----------------------------|--|-------------|------|
| Vcc | Supply voltage | | 17 | V |
| Icc | Total current | | 7 | A |
| P _{in(max)} | Input power | Vcc1 ≤ 12.5V, Z _G = Z _L = 50 Ω | 600 | mW |
| P _{o(max)} | Output power | Z _G = Z _L = 50 Ω | 40 | 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 (Tc = 25°C unless otherwise noted)

| Symbol | Parameter | Test conditions | Limits | | Unit |
|-----------------|---------------------|--|---------------------------|------|------|
| | | | Min | Max | |
| f | Frequency range | Vcc1 = Vcc2 = 12.5V P _{in} = 200mW Z _G = Z _L = 50 Ω | 185 | 200 | MHz |
| P _o | Output power | | 30 | | W |
| η _T | Total efficiency | | 43 | | % |
| 2fo | 2nd. harmonic | | | - 25 | dBc |
| 3fo | 3rd. harmonic | | | - 30 | dBc |
| ρ _{in} | Input VSWR | | | 2.8 | - |
| - | Load VSWR tolerance | Vcc1 = Vcc2 = 15.2V P _o = 30W (P _{in} : controlled) Load VSWR ≥ 20:1 (All phase) Z _G = 50Ω | No degradation or destroy | | - |

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