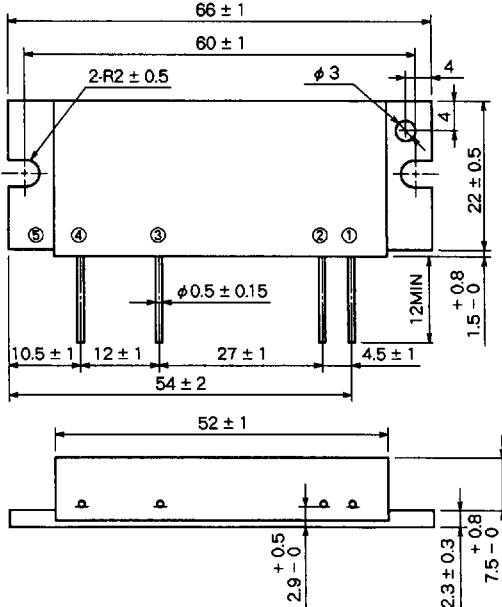


M57737R

144-148MHz, 12.5V, 30W, FM MOBILE RADIO

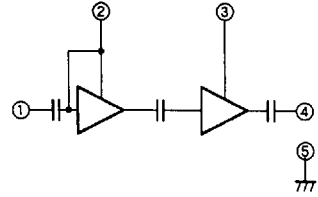
OUTLINE DRAWING

Dimensions in mm



H2R

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	400	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	144	148	MHz
P _o	Output power		30		W
η _T	Total efficiency		45		%
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 = 35W (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.