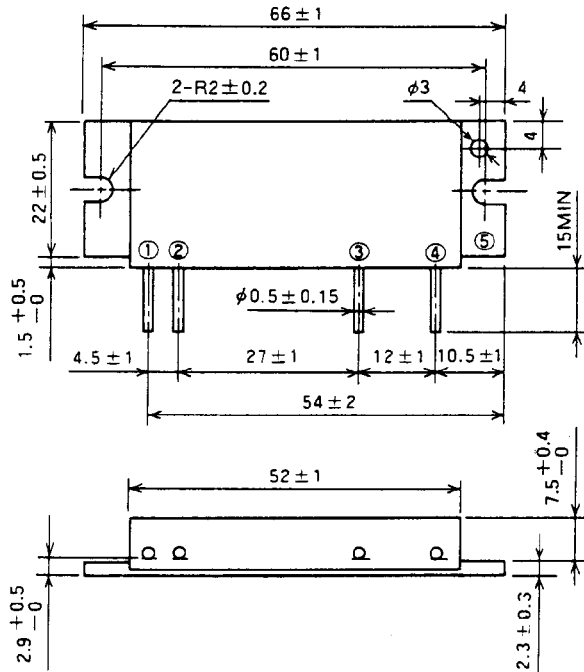


M57774S

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

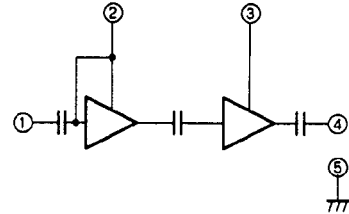
OUTLINE DRAWING

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 (T_c = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V _{cc}	Supply voltage		17	V
I _{cc}	Total current		7	A
P _{in(max)}	Input power	V _{cc1} ≤ 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 (T_c = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V _{cc1} = V _{cc2} = 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		%
2f _o	2nd. harmonic			-25	dBc
3f _o	3rd. harmonic			-30	dBc
ρ _{in}	Input VSWR			2.8	-
-	Load VSWR tolerance	V _{cc1} = V _{cc2} = 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.