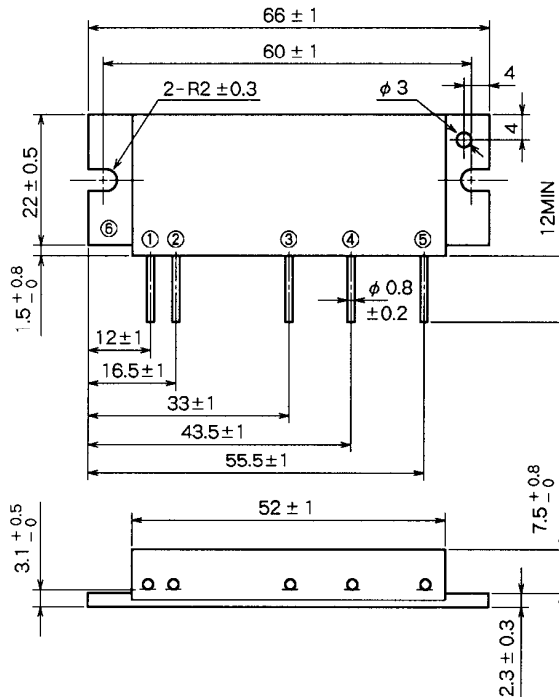


M57788UH

470-490MHz, 12.5V, 40W, FM MOBILE RADIO

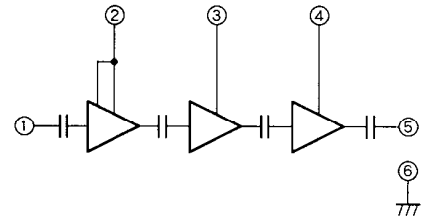
OUTLINE DRAWING

Dimensions in mm



H3

BLOCK DIAGRAM



PIN :

- ① P_{in} : RF INPUT
- ② V_{cc1} : 1st. DC SUPPLY
- ③ V_{cc2} : 2nd. DC SUPPLY
- ④ V_{cc3} : 3rd. DC SUPPLY
- ⑤ P_o : RF OUTPUT
- ⑥ GND : FIN

ABSOLUTE MAXIMUM RATINGS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V_{cc1}	Supply voltage		16	V
$V_{cc2,3}$			17	V
I_{cc}	Total current		12	A
$P_{in(max)}$	Input power	$Z_G = Z_L = 50 \Omega$	0.5	W
$P_{o(max)}$	Output power	$Z_G = Z_L = 50 \Omega$	50	W
$T_{c(OP)}$	Operation case temperature		- 30 to 110	$^\circ\text{C}$
T_{stg}	Storage temperature		- 40 to 110	$^\circ\text{C}$

Note. Above parameters are guaranteed independently.

ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	$P_{in} = 0.3\text{W}$ $V_{cc} = 12.5\text{V}$ $Z_G = Z_L = 50 \Omega$	470	490	MHz
P_o	Output power		40		W
η_T	Total efficiency		40		%
$2f_o$	2nd. harmonic			- 30	dBc
$3f_o$	3rd. harmonic			- 30	dBc
ρ_{in}	Input VSWR			3.5	-
-	Load VSWR tolerance	$V_{cc} = 15.2\text{V}$, $P_o = 40\text{W}$ (P_{in} : controlled) Load VSWR = 8.8 : 1 (All phase), $Z_G = 50 \Omega$	No degradation or destroy		-

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