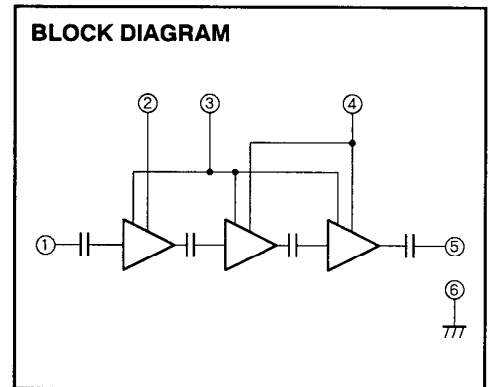
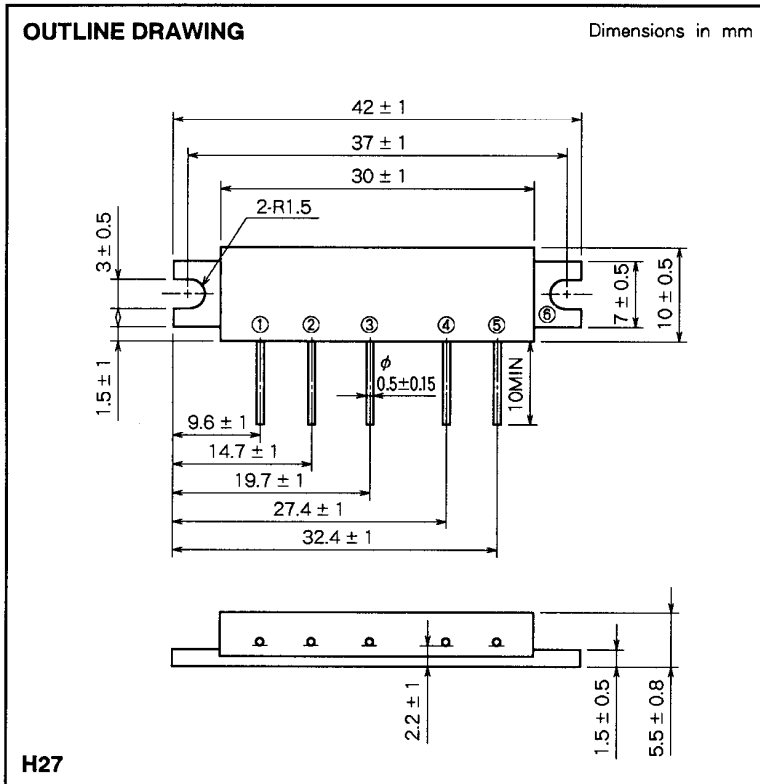


M67749H

440-470MHz, 12.5V, 7W, FM PORTABLE RADIO



- PIN :
- ① Pin : RF INPUT
 - ② Vcc1 : 1st. DC SUPPLY
 - ③ VBB : BASE BIAS SUPPLY
 - ④ Vcc2 : 2nd. DC SUPPLY
 - ⑤ Po : RF OUTPUT
 - ⑥ GND : FIN

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

Symbol	Parameter	Conditions	Ratings	Unit
V_{CC}	Supply voltage	$V_{BB} \leq 5V$	15	V
V_{BB}	Base bias	$V_{CC} \leq 12.5V$	5.5	V
I_{CC}	Total current		4	A
$P_{in(max)}$	Input power	$Z_G = Z_L = 50 \Omega$, $V_{CC1} \leq 12.5V$	40	mW
$P_{O(max)}$	Output power	$Z_G = Z_L = 50 \Omega$	10	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		440	470	MHz
P_o	Output power	$P_{in} = 20mW$	7		W
η_T	Total efficiency	$V_{BB} = 5V$	38		%
$2f_o$	2nd. harmonic	$V_{CC} = 12.5V$		- 20	dBc
$3f_o$	3rd. harmonic	$Z_G = Z_L = 50 \Omega$		- 25	dBc
ρ_{in}	Input VSWR			2.5	-
-	Load VSWR tolerance	$V_{CC2} = 13.2V$, $V_{BB} = 5V$, $P_{in} = 20mW$ $P_o = 7W$ (V_{CC1} : controlled) Load VSWR = 20 : 1 (All phase), $Z_G = 50\Omega$	No degradation or destroy		-

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