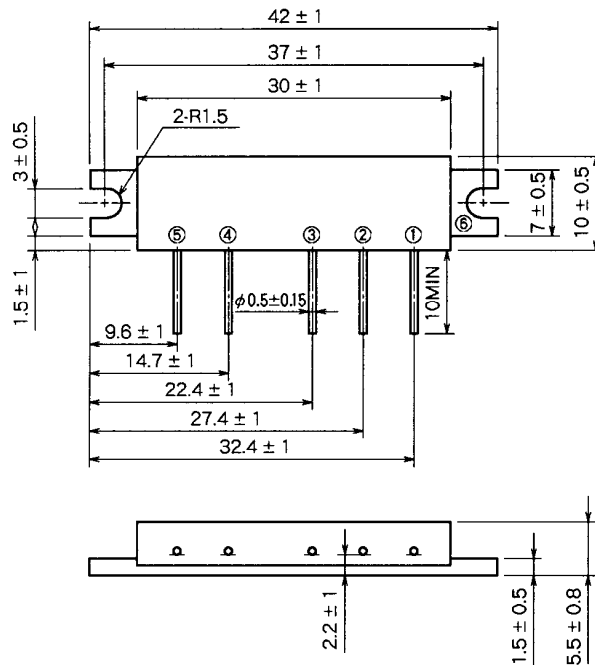


M67749HR

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

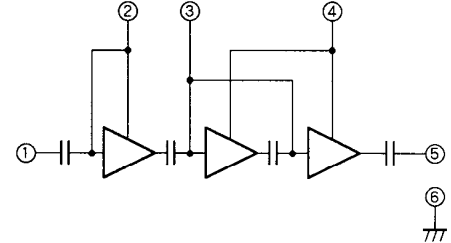
OUTLINE DRAWING

Dimensions in mm



H27R

BLOCK DIAGRAM



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 (Tc = 25 °C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage	VBB ≤ 5V	16	V
VBB	Base bias	Vcc ≤ 12.5V	6	V
Icc	Total current		4	A
Pin(max)	Input power	ZG = ZL = 50 Ω, Vcc1 ≤ 12.5V	40	mW
Po(max)	Output power	ZG = ZL = 50 Ω	10	W
Tc(OP)	Operation case temperature		- 30 to 110	°C
Tstg	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	Pin = 20mW VBB = 5V Vcc = 12.5V ZG = ZL = 50 Ω	440	470	MHz
Po	Output power		7		W
η T	Total efficiency		38		%
2fo	2nd. harmonic			- 25	dBc
3fo	3rd. harmonic			- 30	dBc
ρin	Input VSWR			2.5	-
-	Load VSWR tolerance	Vcc2=13.2V, VBB=5V, Pin = 20mW Po = 7W (Vcc1 : controlled) Load VSWR=20:1 (All phase), 2sec. ZG = 50Ω	No degradation or destroy		-

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