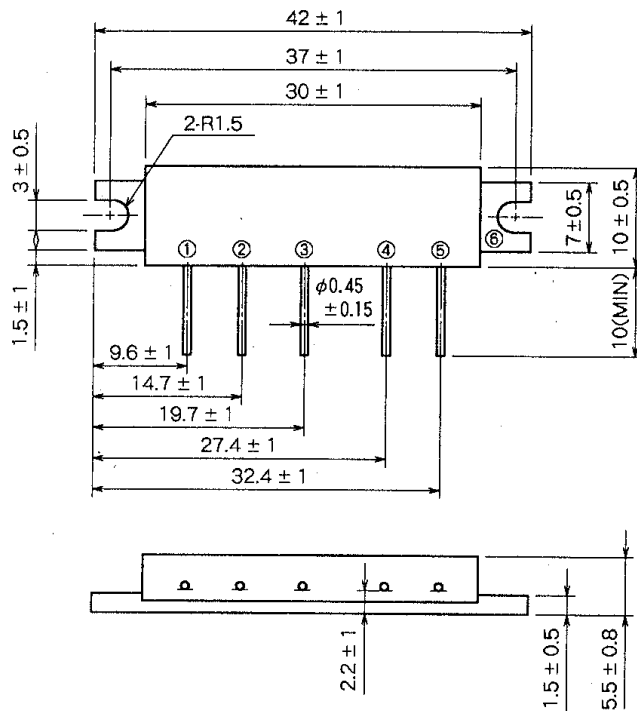


M67748UH

220-225MHz, 12.5V, 7W, FM PORTABLE RADIO

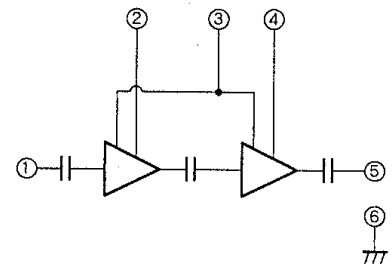
OUTLINE DRAWING

Dimensions in mm



H27

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 = 4V	15	V
VBB	Base bias	Vcc ≤ 12.5V	5.5	V
Icc	Total current		4	A
Pin(max)	Input power	Vcc1 ≤ 12.5V, ZG = ZL = 50Ω	40	mW
Po(max)	Output power	Vcc1 ≤ 12.5V, ZG = ZL = 50Ω	10	W
Tc(OP)	Operation case temperature	ZG = ZL = 50Ω	- 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	Vcc1 = Vcc2 = 12.5V VBB = 5V Pin = 20mW ZG = ZL = 50Ω	220	225	MHz
Po	Output power		7		W
ηT	Total efficiency		45		%
2fo	2nd. harmonic			- 20	dBc
3fo	3rd. harmonic			- 25	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), 5sec. ZG = 50Ω	No degradation or destroy		-

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