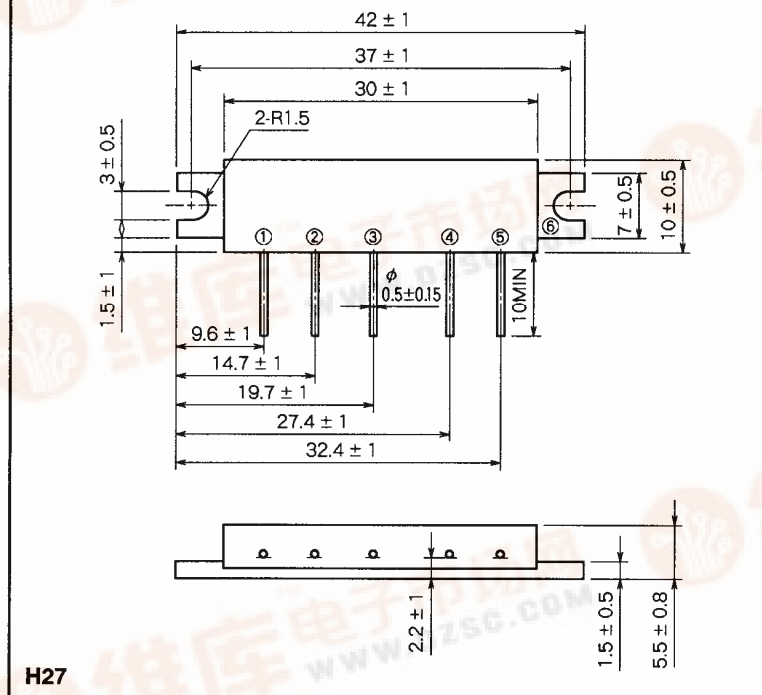
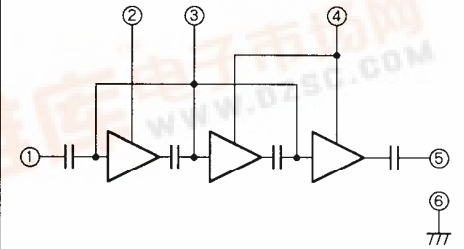


M67749SL

350-370MHz, 12.5V, 7W, FM PORTABLE RADIO

OUTLINE DRAWING

Dimensions in mm

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

Symbol	Parameter	Conditions	Ratings	Unit
VCC	Supply voltage	VBB = 5V, ZL = 50Ω	15	V
VBB	Base bias	VCC ≤ 12.5V	5.5	V
ICC	Total current		4	A
P _{in(max)}	Input power	VCC1 ≤ 12.5V, VBB = 5V, ZG = ZL = 50Ω	40	mW
P _{o(max)}	Output power	VCC1 ≤ 12.5V, VBB = 5V, ZG = ZL = 50Ω	10	W
T _{c(OP)}	Operation case temperature	ZG = ZL = 50Ω	-30 to 110	°C
T _{stg}	Storage temperature		-40 to 110	°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	VCC1 = VCC2 = 12.5V VBB = 5V P _{in} = 20mW ZG = ZL = 50Ω	350	370	MHz
P _o	Output power		7		W
η _T	Total efficiency		35		%
2fo	2nd. harmonic			-25	dBc
3fo	3rd. harmonic			-30	dBc
ρ _{in}	Input VSWR			2.5	-
-	Load VSWR tolerance	VCC2 = 13.2V, VBB = 5V, P _{in} = 20mW P _o = 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.