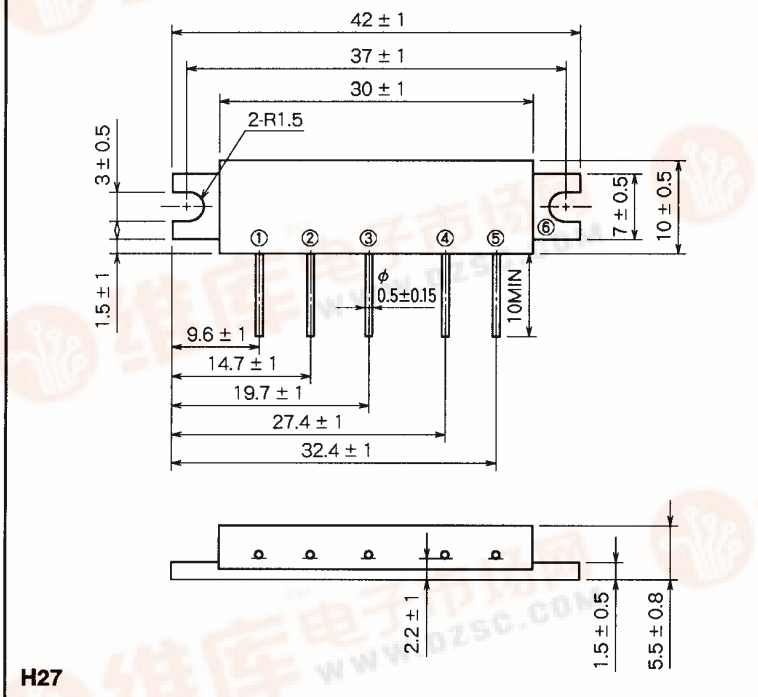
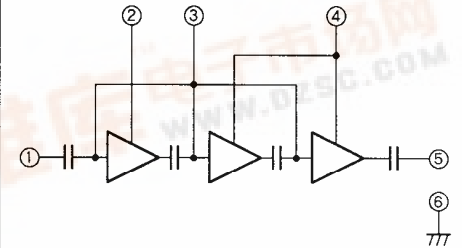


M67749EL

335-360MHz, 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 (Tc = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage	VBB = 5V	15	V
VBB	Base bias	Vcc ≤ 12.5V	5.5	V
Icc	Total current		4	A
P _{in(max)}	Input power	Vcc1 ≤ 12.5V, Z _G = Z _L = 50Ω	40	mW
P _{o(max)}	Output power	Vcc1 ≤ 12.5V, Z _G = Z _L = 50Ω	10	W
T _{c(OP)}	Operation case temperature	Z _G = Z _L = 50Ω	- 30 to 110	°C
T _{stg}	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 P _{in} = 20mW Z _G = Z _L = 50Ω	335	360	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. Z _G = 50Ω	No degradation or destroy		-

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