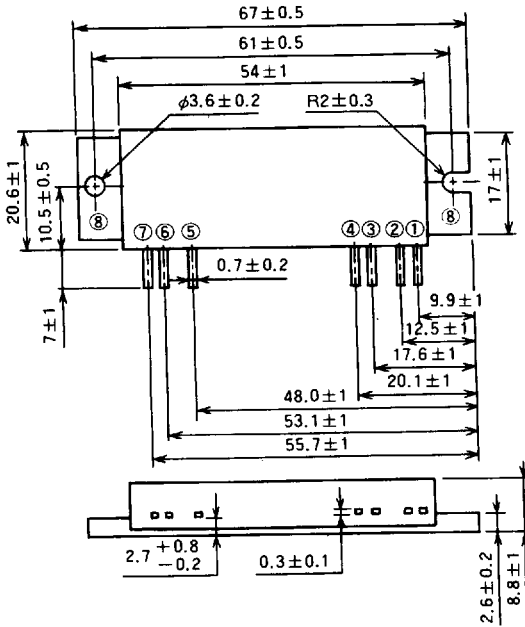


# M67729L2

400-420MHz, 12.5V, 20W, FM MOBILE RADIO

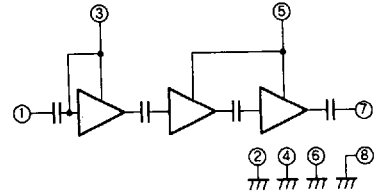
## OUTLINE DRAWING

Dimensions in mm



H18

## BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② GND
- ③ Vcc1 : 1st. DC SUPPLY
- ④ GND
- ⑤ Vcc2 : 2nd. DC SUPPLY
- ⑥ GND
- ⑦ Po : RF OUTPUT
- ⑧ GND : FIN

## ABSOLUTE MAXIMUM RATINGS (T<sub>c</sub> = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
V <sub>cc</sub>	Supply voltage		16	V
I <sub>cc</sub>	Total current		6	A
P <sub>in(max)</sub>	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω, V <sub>cc1</sub> ≤ 12.5V	0.3	W
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	30	W
T <sub>c(OP)</sub>	Operation case temperature		- 30 to 100	°C
T <sub>stg</sub>	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

## ELECTRICAL CHARACTERISTICS (T<sub>c</sub> = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P <sub>in</sub> = 0.15W V <sub>cc</sub> = 12.5V Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	400	420	MHz
P <sub>o</sub>	Output power		20		W
η <sub>T</sub>	Total efficiency		35		%
2f <sub>o</sub>	2nd. harmonic			- 30	dBc
3f <sub>o</sub>	3rd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			2.8	-
-	Load VSWR tolerance	V <sub>cc</sub> = 15.5V, P <sub>o</sub> = 25W (P <sub>in</sub> : controlled) Load VSWR=20:1 (All phase), 2sec. Z <sub>G</sub> = 50 Ω	No degradation or destroy		-

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