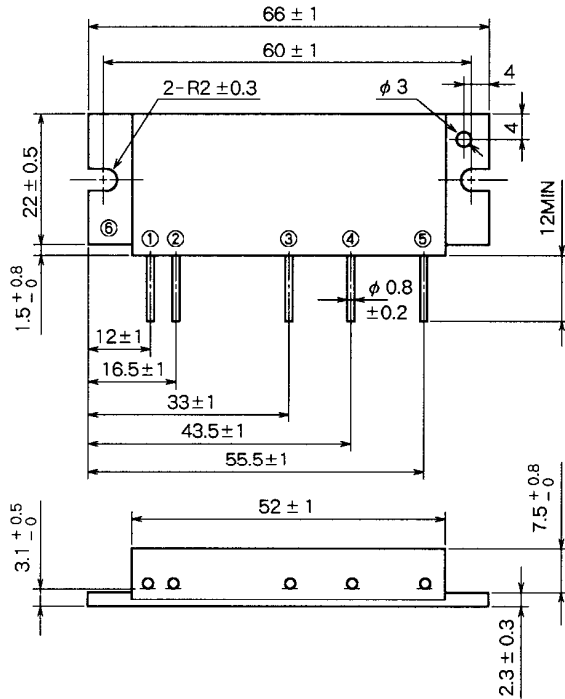


# M57729SH

490-512MHz, 12.5V, 30W, FM MOBILE RADIO

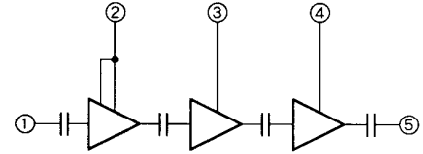
## OUTLINE DRAWING

Dimensions in mm



H3

## BLOCK DIAGRAM



PIN :

- ① Pin : RF INPUT
- ② Vcc1 : 1st. DC SUPPLY
- ③ Vcc2 : 2nd. DC SUPPLY
- ④ Vcc3 : 3rd. 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		17	V
Icc	Total current		10	A
Pin(max)	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	0.6	W
Po(max)	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	40	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	P <sub>in</sub> = 0.3W Vcc = 12.5V Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	490	512	MHz
Po	Output power		30		W
η <sub>T</sub>	Total efficiency		40		%
2fo	2nd. harmonic			- 30	dBc
3fo	3rd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			2.8	-
-	Load VSWR tolerance	Vcc = 15.2V, Po = 30W (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.