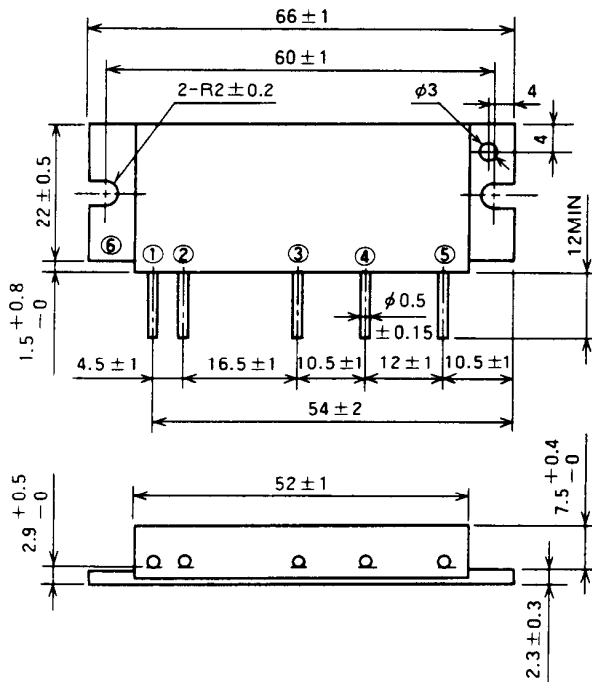


# M57714M

430-450MHz, 12.5V, 7W, FM MOBILE RADIO

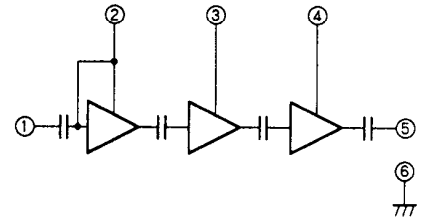
### OUTLINE DRAWING

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		4	A
P <sub>in(max)</sub>	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	0.2	W
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	12	W
T <sub>c(OP)</sub>	Operation case temperature		- 30 to 110	°C
T <sub>stg</sub>	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> = 0.1W Vcc = 12.5V Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	430	450	MHz
P <sub>o</sub>	Output power		7		W
η <sub>T</sub>	Total efficiency		38		%
2f <sub>o</sub>	2nd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			2	-
-	Load VSWR tolerance	Vcc = 15.2V, P <sub>o</sub> = 7W (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.