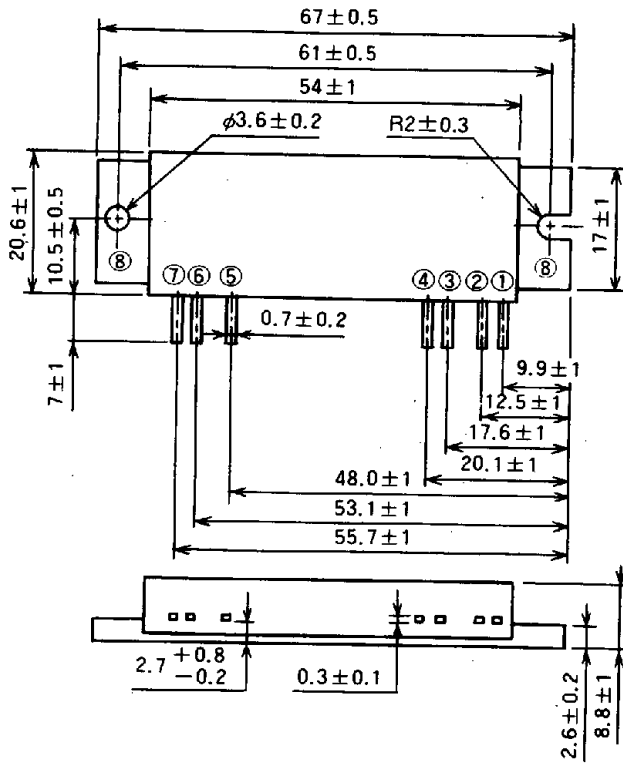


# M67729H2

450-460MHz, 12.5V, 20W, FM MOBILE RADIO

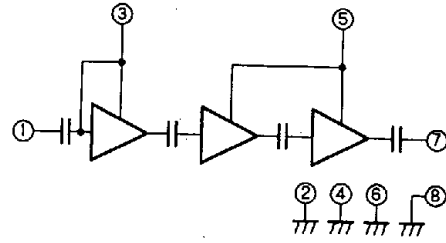
## OUTLINE DRAWING

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 (Tc = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Ratings	Unit
Vcc	Supply voltage		16	V
Icc	Total current		6	A
Pin(max)	Input power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω, Vcc1 ≤ 12.5V	0.3	W
Po(max)	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	30	W
Tc(OP)	Operation case temperature		-30 to 110	°C
Tstg	Storage temperature		-40 to 110	°C

Note. Above parameters are guaranteed independently.

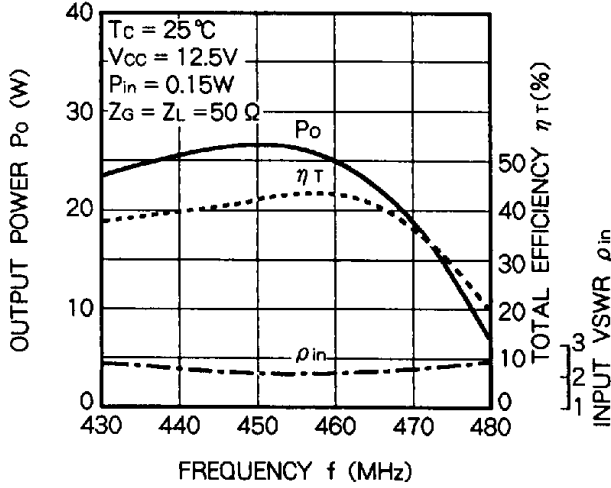
## ELECTRICAL CHARACTERISTICS (Tc = 25°C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	P <sub>in</sub> = 0.15W Vcc = 12.5V Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	450	460	MHz
Po	Output power		20		W
η <sub>T</sub>	Total efficiency		35		%
2fo	2nd. harmonic			-40	dBc
3fo	3rd. harmonic			-40	dBc
ρ <sub>in</sub>	Input VSWR		2	-	
-	Load VSWR tolerance	Vcc = 15.5V, Po = 25W (P <sub>in</sub> : controlled) Load VSWR=20:1 (All phase), 2sec. Z <sub>G</sub> = 50 Ω	No degradation or destroy		-

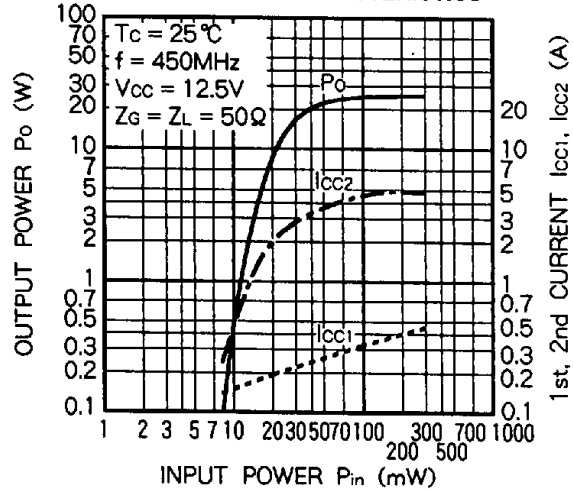
Note. Above parameters, ratings, limits and conditions are subject to change.

### TYPICAL PERFORMANCE DATA

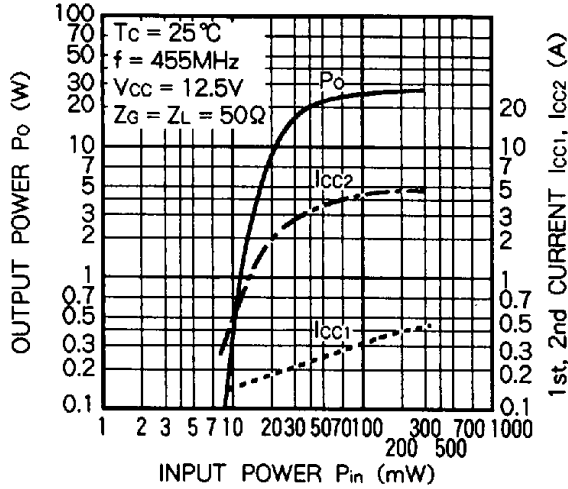
**OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY CHARACTERISTICS**



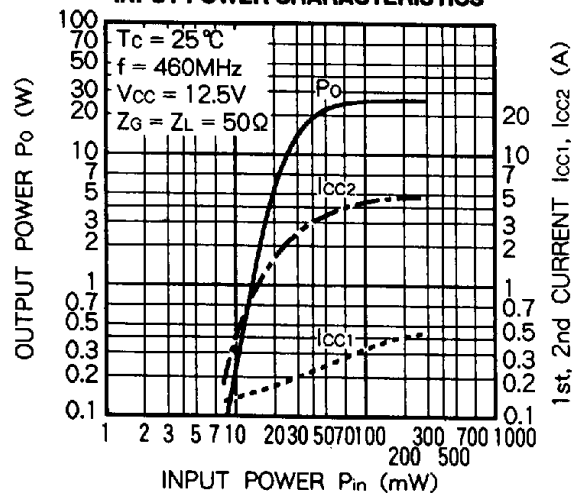
**OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS**



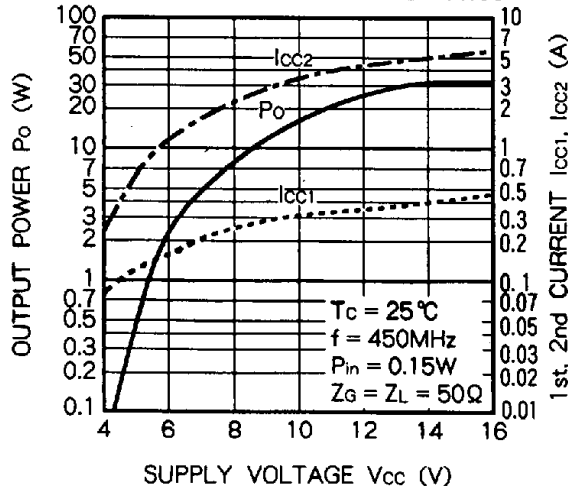
**OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS**



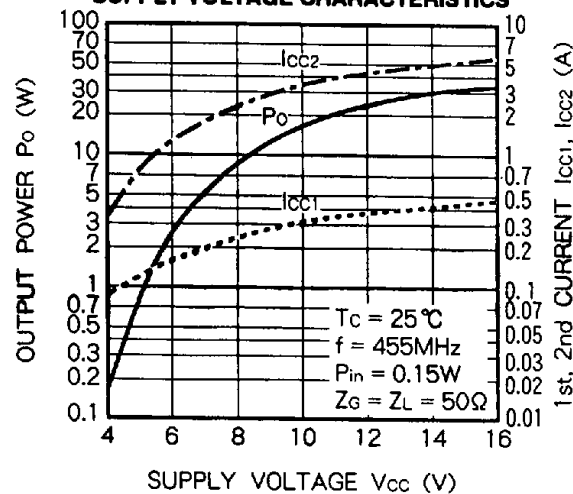
**OUTPUT POWER, 1st, 2nd CURRENT VS. INPUT POWER CHARACTERISTICS**



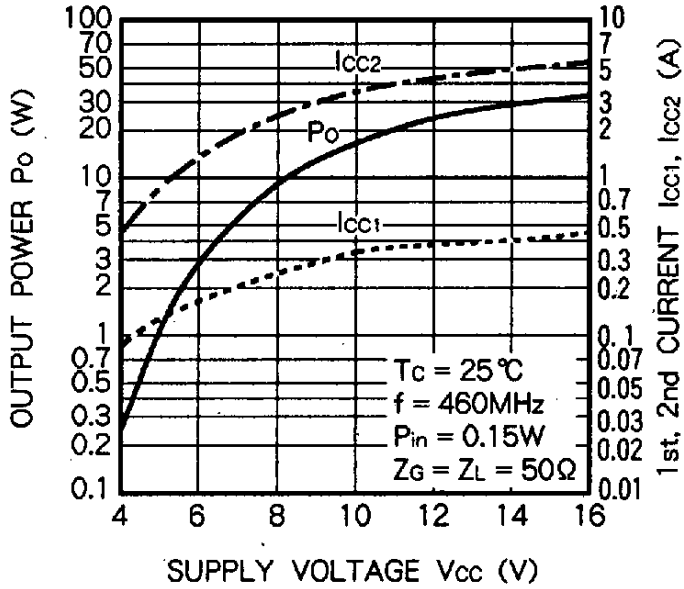
**OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



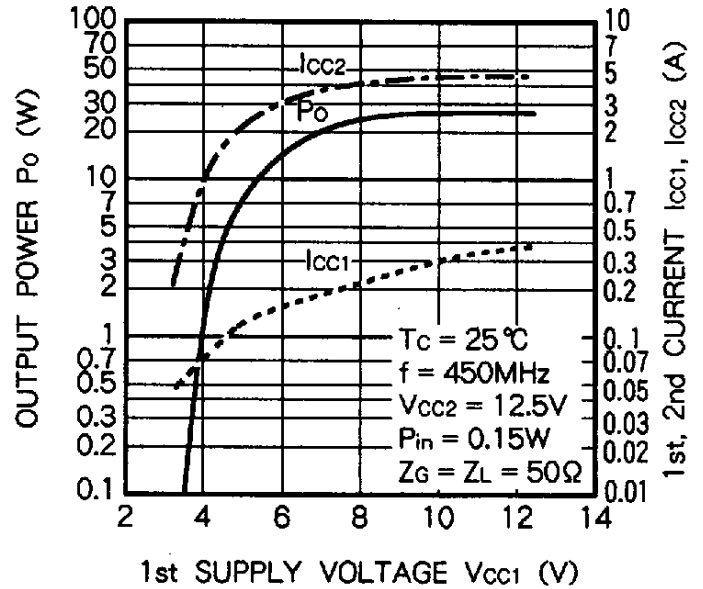
**OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



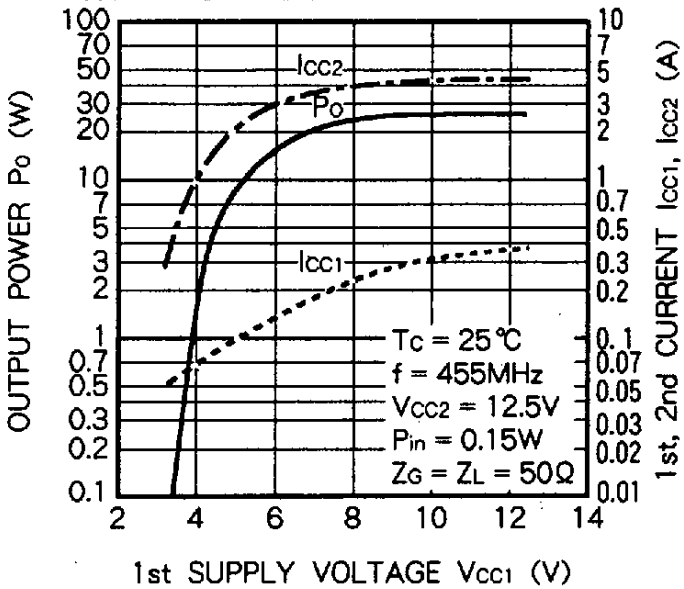
**OUTPUT POWER, 1st, 2nd CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, 1st, 2nd CURRENT VS. 1st SUPPLY VOLTAGE CHARACTERISTICS**

