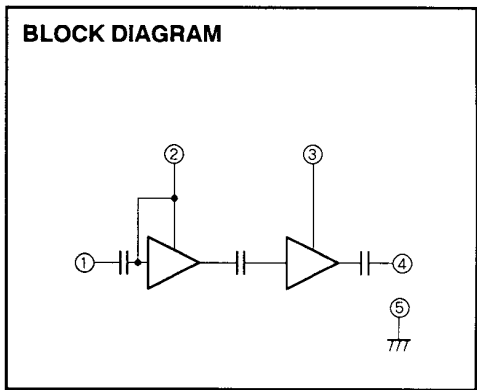
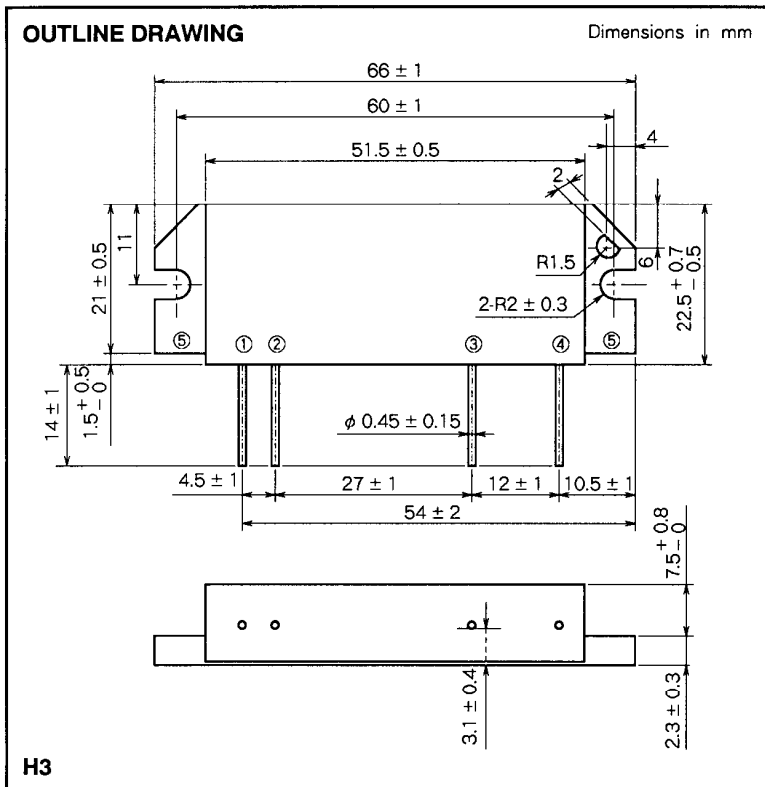


# M68702L

135-160MHz, 12.5V, 60W, FM MOBILE RADIO



PIN :  
 ① Pin : RF INPUT  
 ② Vcc1 : 1st. DC SUPPLY  
 ③ Vcc2 : 2nd. DC SUPPLY  
 ④ Po : RF OUTPUT  
 ⑤ 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		17	V
I <sub>cc</sub>	Total current		20	A
P <sub>in(max)</sub>	Input power	V <sub>cc1</sub> ≤ 12.5V, Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	400	mW
P <sub>o(max)</sub>	Output power	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	70	W
T <sub>c(OP)</sub>	Operation case temperature	Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	- 30 to 110	°C
T <sub>stg</sub>	Storage temperature		- 40 to 110	°C

Note. Above parameters are guaranteed independently.

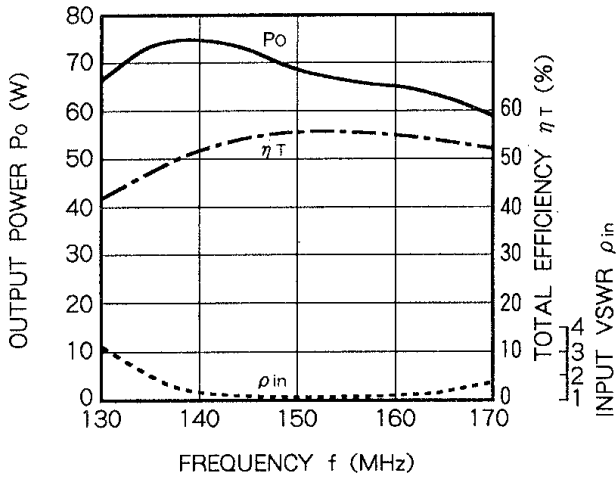
**ELECTRICAL CHARACTERISTICS** (T<sub>c</sub> = 25 °C unless otherwise noted)

Symbol	Parameter	Test conditions	Limits		Unit
			Min	Max	
f	Frequency range	V <sub>cc</sub> = 12.5V P <sub>in</sub> = 300mW Z <sub>G</sub> = Z <sub>L</sub> = 50 Ω	135	160	MHz
P <sub>o</sub>	Output power		60		W
η <sub>T</sub>	Total efficiency		40		%
2f <sub>o</sub>	2nd. harmonic			- 30	dBc
3f <sub>o</sub>	3rd. harmonic			- 30	dBc
ρ <sub>in</sub>	Input VSWR			3	-
-	Load VSWR tolerance	V <sub>cc</sub> = 15.2V P <sub>o</sub> = 60W(P <sub>in</sub> : controlled) Load VSWR = 8 : 1(All phase), Z <sub>G</sub> = 50 Ω	No degradation or destroy		-

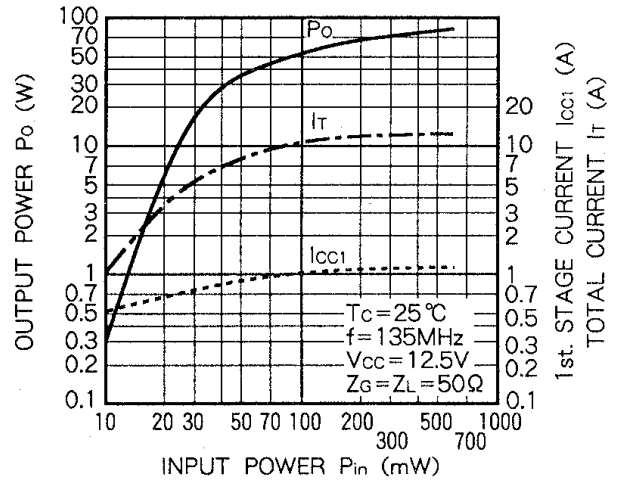
Note. Above parameters, ratings, limits and conditions are subject to change.

TYPICAL PERFORMANCE DATA

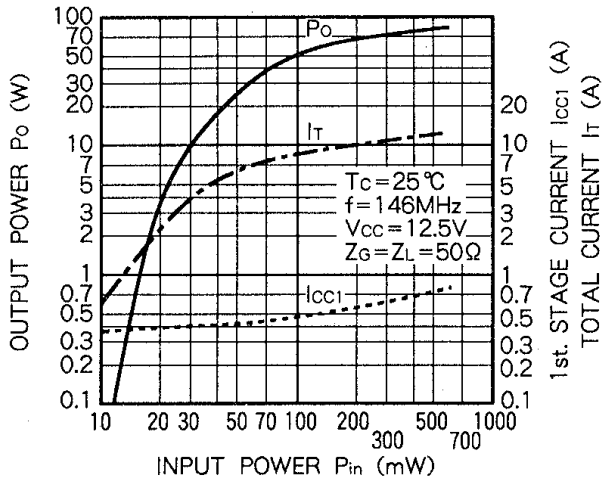
OUTPUT POWER, TOTAL EFFICIENCY, INPUT VSWR VS. FREQUENCY CHARACTERISTICS



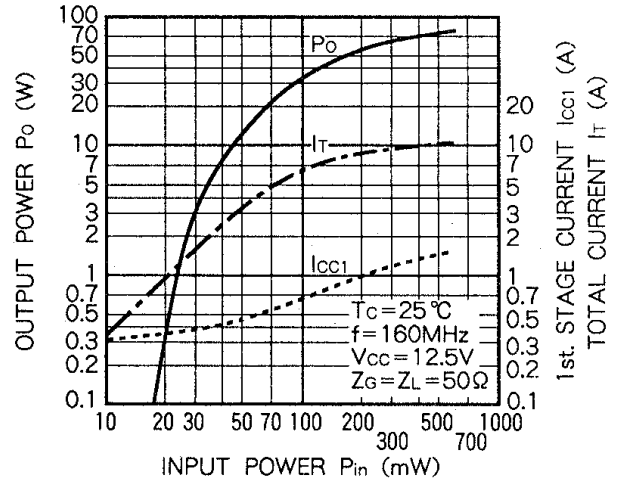
OUTPUT POWER, TOTAL CURRENT, 1st. STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



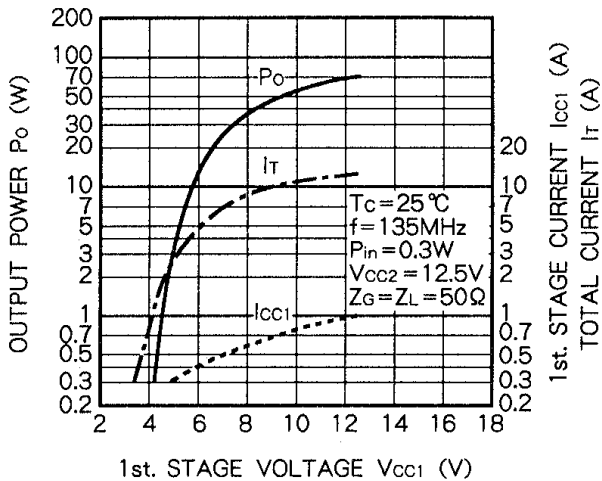
OUTPUT POWER, TOTAL CURRENT, 1st. STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



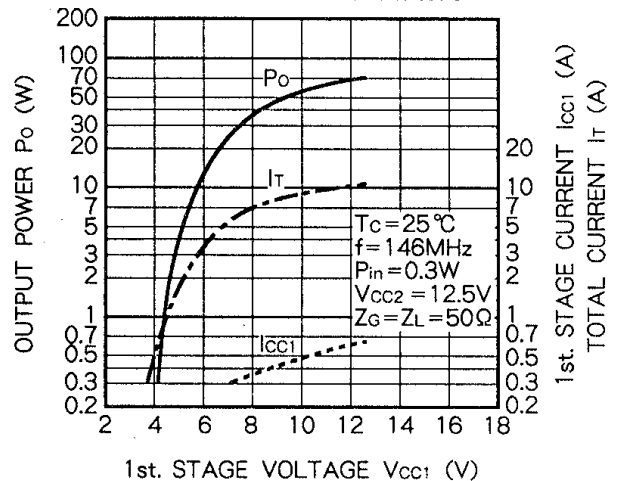
OUTPUT POWER, TOTAL CURRENT, 1st. STAGE CURRENT VS. INPUT POWER CHARACTERISTICS



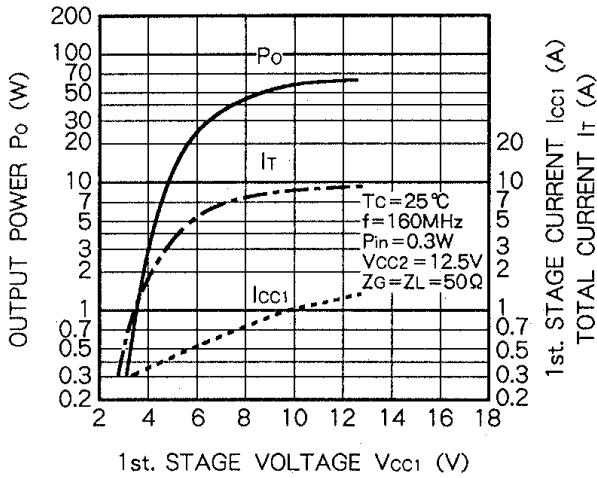
OUTPUT POWER, 1st. STAGE CURRENT, TOTAL CURRENT VS. 1st. STAGE VOLTAGE CHARACTERISTICS



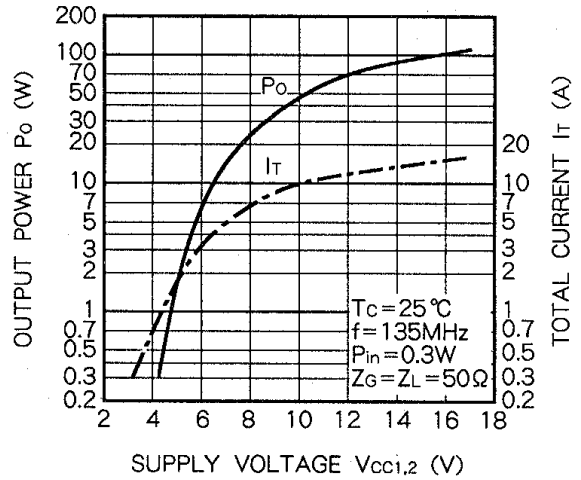
OUTPUT POWER, 1st. STAGE CURRENT, TOTAL CURRENT VS. 1st. STAGE VOLTAGE CHARACTERISTICS



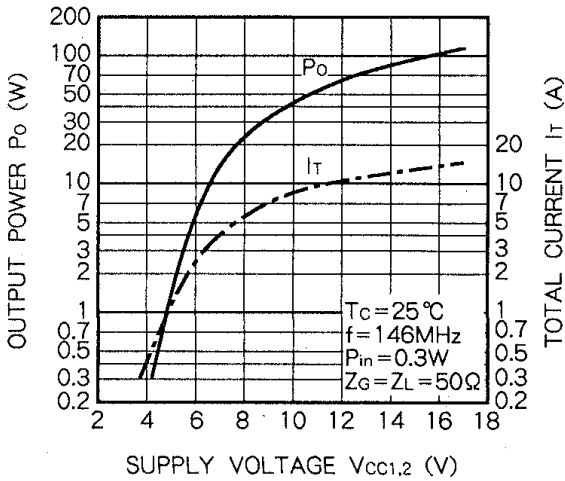
**OUTPUT POWER, 1st. STAGE CURRENT, TOTAL CURRENT VS. 1st. STAGE VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, TOTAL CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, TOTAL CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**



**OUTPUT POWER, TOTAL CURRENT VS. SUPPLY VOLTAGE CHARACTERISTICS**

